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(FILE 'HOME' ENTERED AT 02:39:31 ON 30 MAY 2003)

FILE 'REGISTRY' ENTERED AT 02:39:41 ON 30 MAY 2003

L1 STRUCTURE UPLOADED

L2 0 L1 SSS

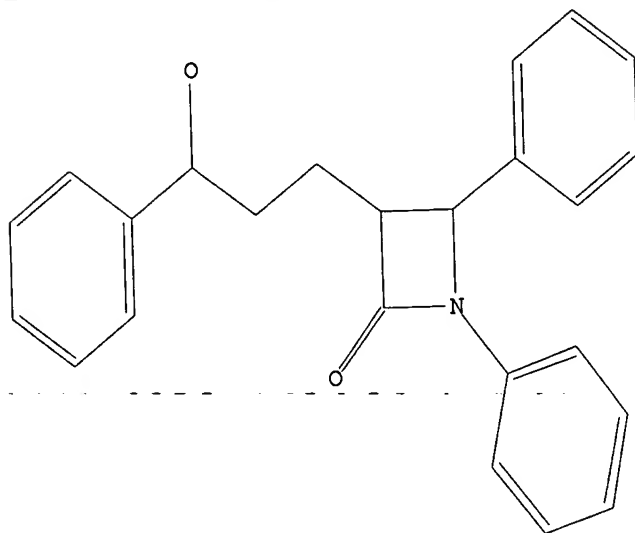
L3 200 L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 02:40:51 ON 30 MAY 2003

L4 20 L3

=> d que stat l4

L1 STR



Structure attributes must be viewed using STN Express query preparation.

L3 200 SEA FILE=REGISTRY SSS FUL L1

L4 20 SEA FILE=CAPLUS ABB=ON PLU=ON L3

=> d l4 ibib abs hitstr

L4 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:658112 CAPLUS

DOCUMENT NUMBER: 137:201523

TITLE: Preparation of  $\beta$ -lactam compounds as serum  
cholesterol-lowering agents

INVENTOR(S): Tomiyama, Hiroshi; Yokota, Masayuki; Noda, Atsushi;  
Ohno, Akira

PATENT ASSIGNEE(S): Kotobuki Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 113 pp.

CODEN: PIXXD2

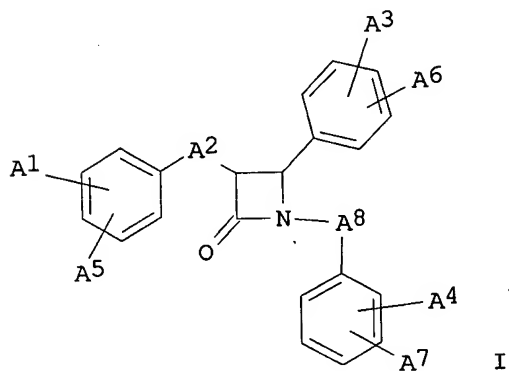
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002066464	A1	20020829	WO 2002-JP1481	20020220
W: AU, BR, CA, CN, ID, IN, JP, KR, MX, RU, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
PRIORITY APPLN. INFO.:			JP 2001-48202	A 20010223
			JP 2001-128031	A 20010425
OTHER SOURCE(S):			MARPAT 137:201523	
GI				



AB The title compds. I [A1, A3 and A4 represent each hydrogen, halogeno, C1-5 alkyl, C1-5 alkoxy, a group represented by the general formula OCM<sub>2</sub>CO<sub>2</sub>R<sub>1</sub> (wherein R<sub>1</sub> represents hydrogen or C1-5 alkyl), etc.; a proviso is given; A2 represents C1-5 alkyl, C1-5 alkoxy, C1-5 alkenyl, C1-5 hydroxyalkyl or C1-5 carbonylalkyl; A5 is (R<sub>3</sub>)<sub>p</sub>; A6 is (R<sub>3</sub>)<sub>q</sub>; A7 is (R<sub>3</sub>)<sub>m</sub>; A8 is (CH<sub>2</sub>)<sub>n</sub>; and n, p, q and m are each an integer of 0, 1 or 2; R<sub>3</sub> is OH, etc.] are prepared Processes for preparing I are disclosed. The cholesterol-lowering activity of compds. of this invention was demonstrated in hamsters.

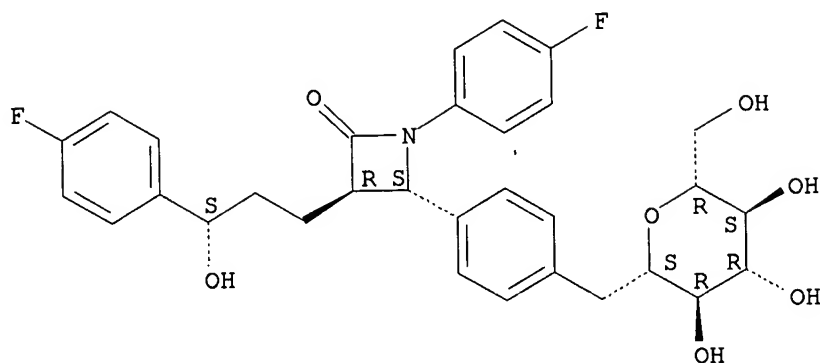
IT 452068-02-9P 452068-03-0P 452068-04-1P  
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 452068-19-8P 452068-21-2P 452068-22-3P  
 452068-25-6P 452068-26-7P 452068-27-8P  
 452068-28-9P 452068-30-3P 452068-31-4P  
 452068-32-5P 452068-33-6P 452068-34-7P  
 452068-35-8P 452068-36-9P 452068-37-0P  
 452068-38-1P 452068-93-8P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of  $\beta$ -lactam compds. as serum cholesterol-lowering agents)

RN 452068-02-9 CAPLUS

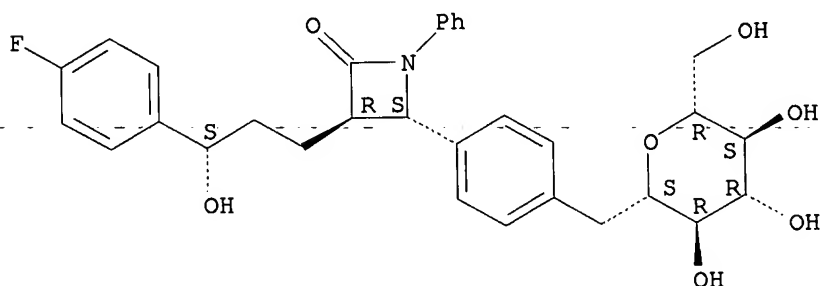
CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-deoxy-1-[4-[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



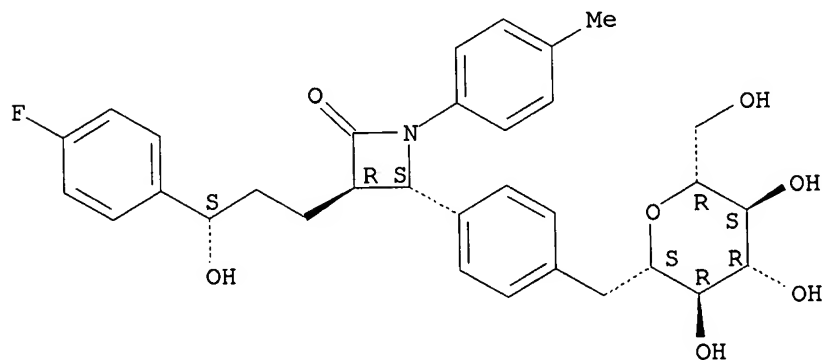
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 CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-deoxy-1-[4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-1-phenyl-2-azetidinyl]phenyl]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 452068-04-1 CAPLUS  
 CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-deoxy-1-[4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-1-(4-methylphenyl)-4-oxo-2-azetidinyl]phenyl]- (9CI) (CA INDEX NAME)

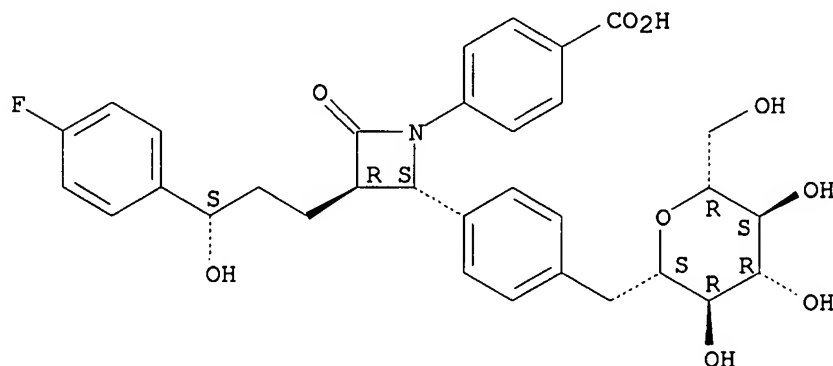
Absolute stereochemistry. Rotation (-).



RN 452068-09-6 CAPLUS

CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-[4-[(2S,3R)-1-(4-carboxyphenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]-1-deoxy- (9CI) (CA INDEX NAME)

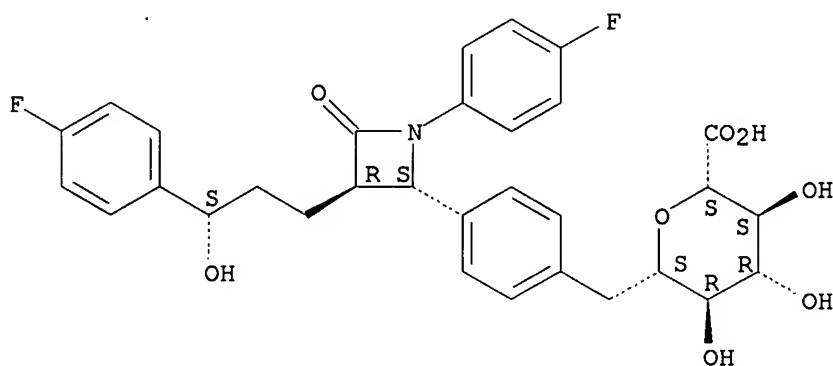
Absolute stereochemistry. Rotation (-).



RN 452068-13-2 CAPLUS

CN L-glycero-L-gulo-Heptonic acid, 2,6-anhydro-7-deoxy-7-[4-[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

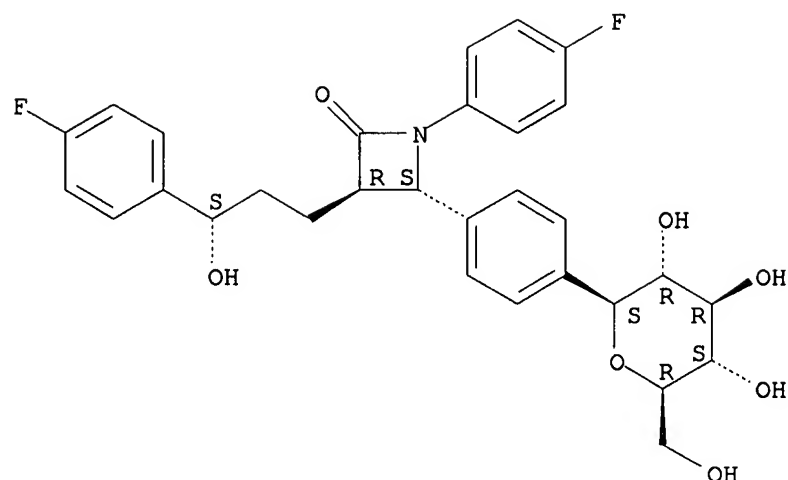


RN 452068-15-4 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-β-D-glucopyranosylphenyl)-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

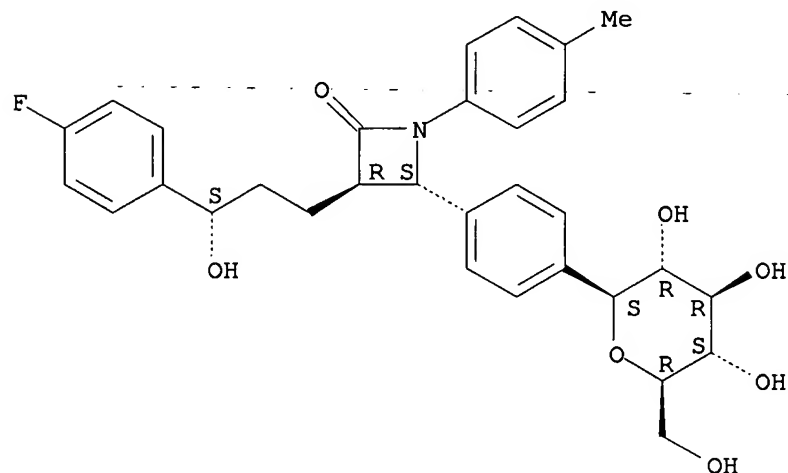




RN 452068-16-5 CAPLUS

CN 2-Azetidinone, 3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-β-D-glucopyranosylphenyl)-1-(4-methylphenyl)-, (3R,4S)- (9CI) (CA INDEX NAME)

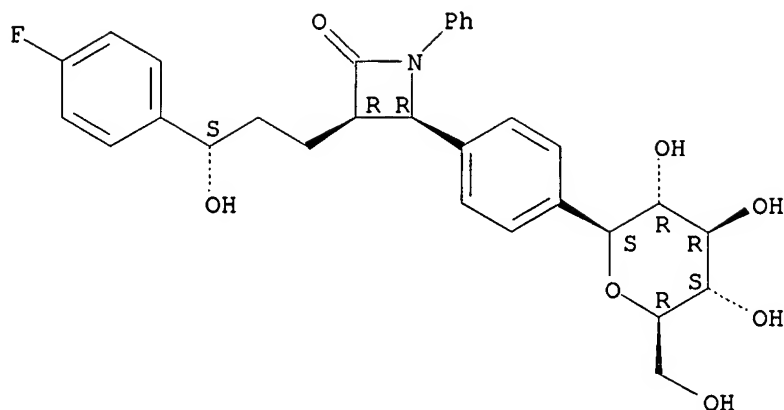
Absolute stereochemistry.



RN 452068-17-6 CAPLUS

CN 2-Azetidinone, 3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-β-D-glucopyranosylphenyl)-1-phenyl-, (3R,4R)- (9CI) (CA INDEX NAME)

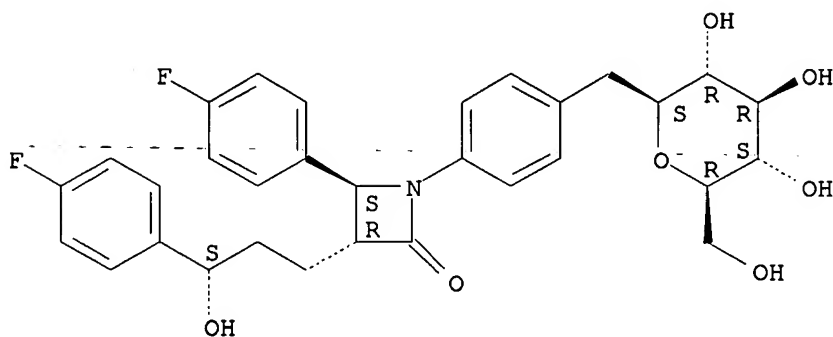
Absolute stereochemistry.



RN 452068-18-7 CAPLUS

CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-deoxy-1-[4-[(2S,3R)-2-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-1-azetidinyl]phenyl]- (9CI) (CA INDEX NAME)

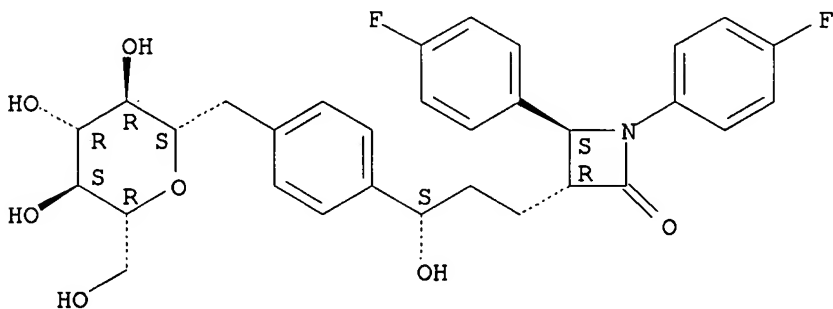
Absolute stereochemistry. Rotation (-).



RN 452068-19-8 CAPLUS

CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-[4-[(1S)-3-[(2S,3R)-1,2-bis(4-fluorophenyl)-4-oxo-3-azetidinyl]-1-hydroxypropyl]phenyl]-1-deoxy- (9CI) (CA INDEX NAME)

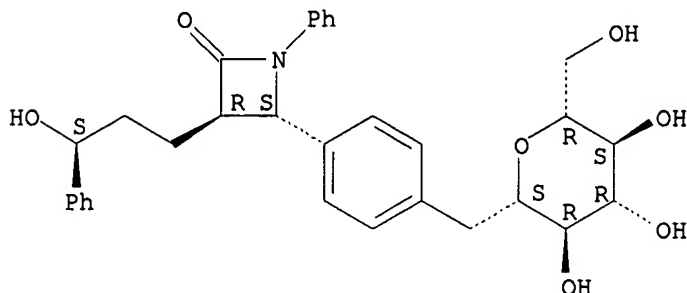
Absolute stereochemistry. Rotation (-).



RN 452068-21-2 CAPLUS

CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-deoxy-1-[4-[(2S,3R)-3-[(3S)-3-hydroxy-3-phenylpropyl]-4-oxo-1-phenyl-2-azetidiny]phenyl]- (9CI) (CA INDEX NAME)

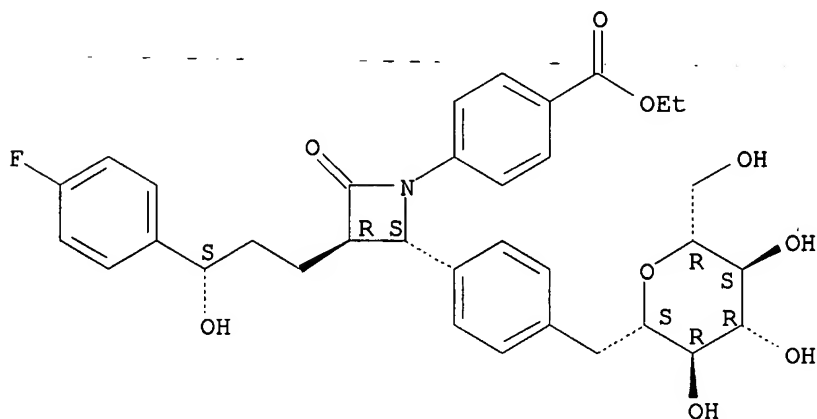
Absolute stereochemistry. Rotation (-).



RN 452068-22-3 CAPLUS

CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-deoxy-1-[4-[(2S,3R)-1-[4-(ethoxycarbonyl)phenyl]-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]- (9CI) (CA INDEX NAME)

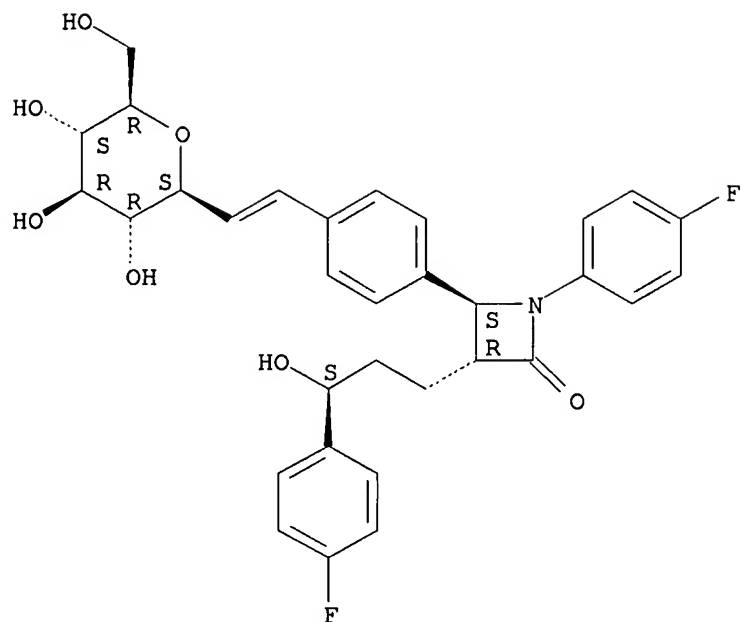
Absolute stereochemistry. Rotation (-).



RN 452068-25-6 CAPLUS

CN D-glycero-D-gulo-Oct-1-enitol, 3,7-anhydro-1,2-dideoxy-1-[4-[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]- (9CI) (CA INDEX NAME)

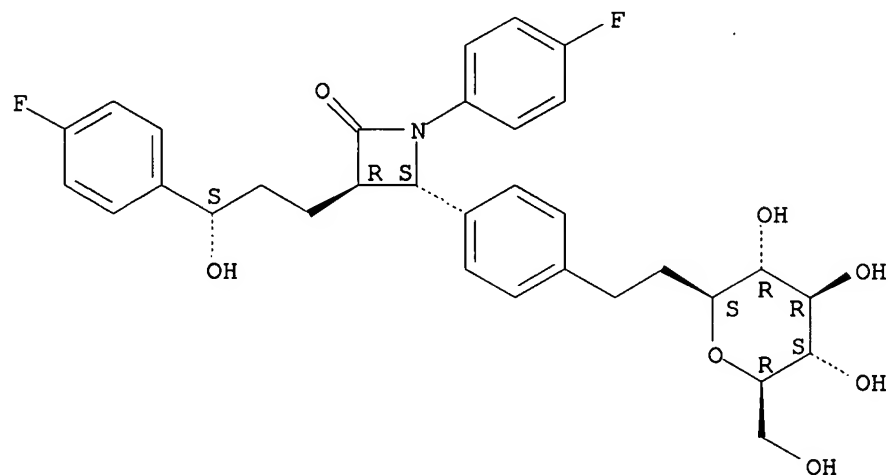
Absolute stereochemistry.  
Double bond geometry unknown.



RN 452068-26-7 CAPLUS

CN D-glycero-D-gulo-Octitol, 3,7-anhydro-1,2-dideoxy-1-[4-[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]- (9CI) (CA INDEX NAME)

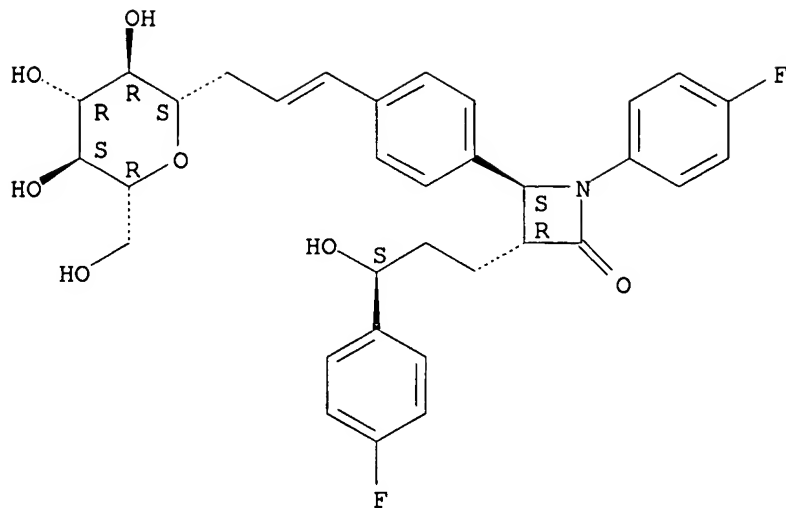
Absolute stereochemistry. Rotation (-).



RN 452068-27-8 CAPLUS

CN D-glycero-D-gulo-Non-1-enitol, 4,8-anhydro-1,2,3-trideoxy-1-[4-[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]- (9CI) (CA INDEX NAME)

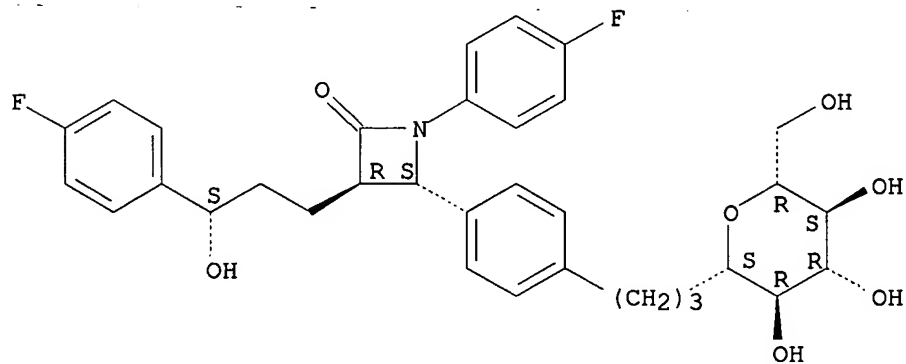
Absolute stereochemistry.  
Double bond geometry unknown.



RN 452068-28-9 CAPLUS

CN D-glycero-D-gulo-Nonitol, 4,8-anhydro-1,2,3-trideoxy-1-[4-[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]- (9CI) (CA INDEX NAME)

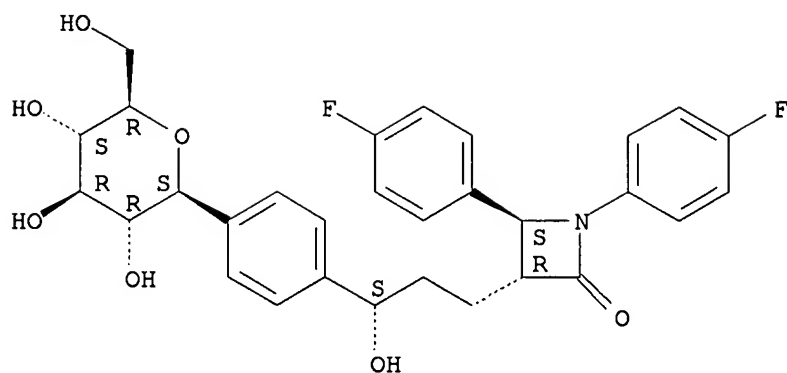
Absolute stereochemistry. Rotation (-).



RN 452068-30-3 CAPLUS

CN 2-Azetidinone, 1,4-bis(4-fluorophenyl)-3-[(3S)-3-(4-β-D-glucopyranosylphenyl)-3-hydroxypropyl]-, (3R,4S)- (9CI) (CA INDEX NAME)

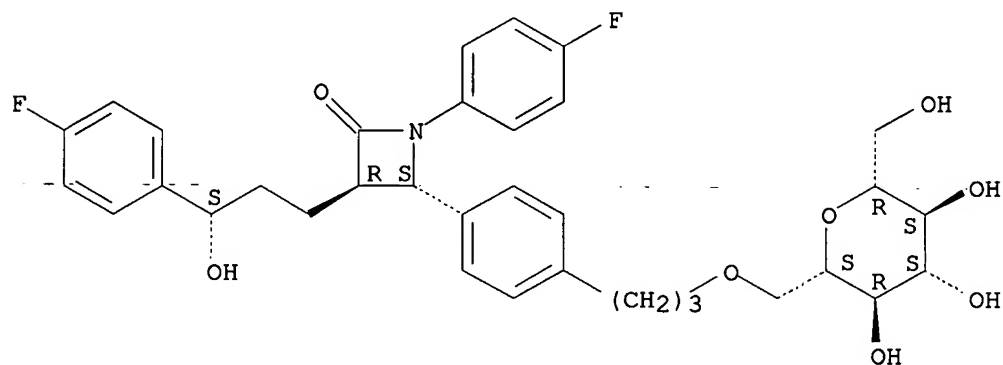
Absolute stereochemistry. Rotation (-).



RN 452068-31-4 CAPLUS

CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-O-[3-[4-[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]propyl]- (9CI) (CA INDEX NAME)

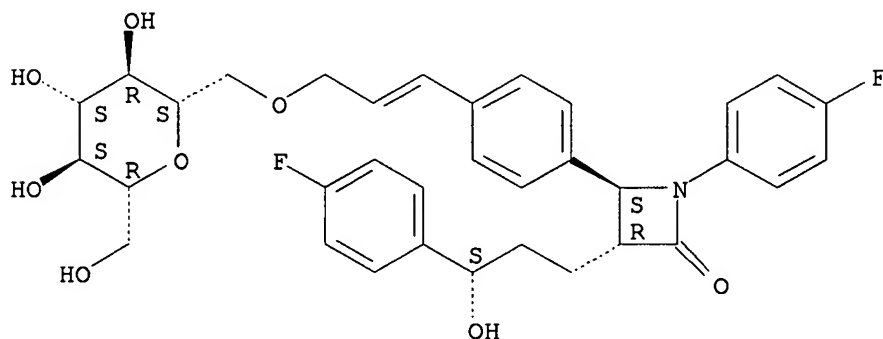
Absolute stereochemistry. Rotation (-).



RN 452068-32-5 CAPLUS

CN D-glycero-D-gulo-Heptitol, 2,6-anhydro-1-O-[3-[4-[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]-2-propenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.

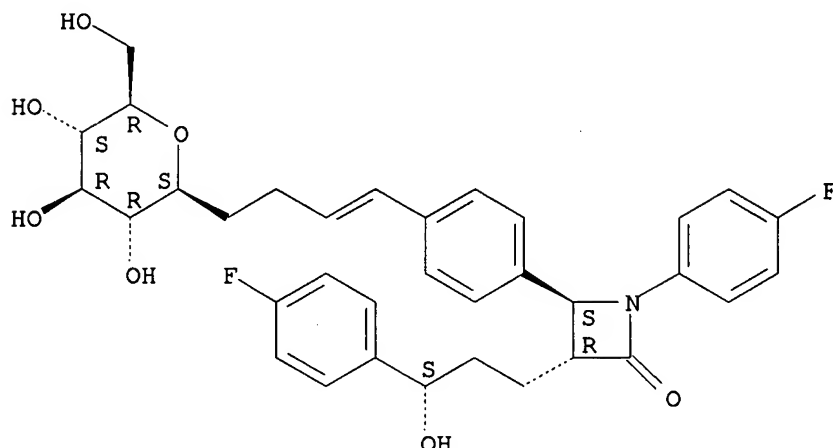


RN 452068-33-6 CAPLUS

CN D-glycero-D-gulo-Dec-1-enitol, 5,9-anhydro-1,2,3,4-tetradexy-1-[4-  
[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-  
oxo-2-azetidiny]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

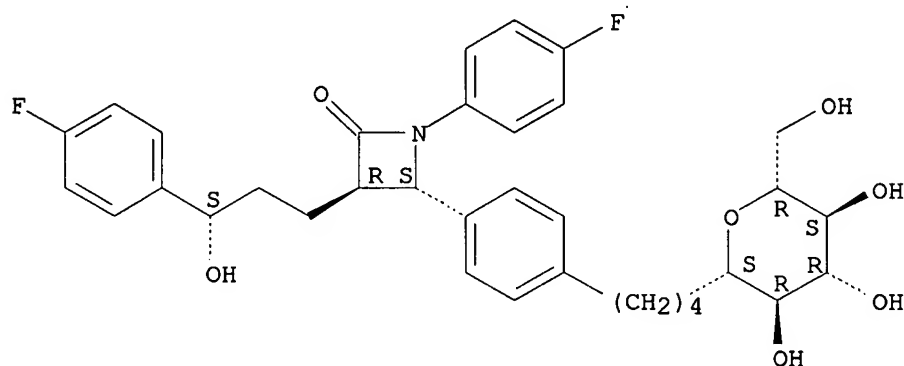
Double bond geometry unknown.



RN 452068-34-7 CAPLUS

CN D-glycero-D-gulo-Decitol, 5,9-anhydro-1,2,3,4-tetradexy-1-[4-[(2S,3R)-1-  
(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-  
azetidiny]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

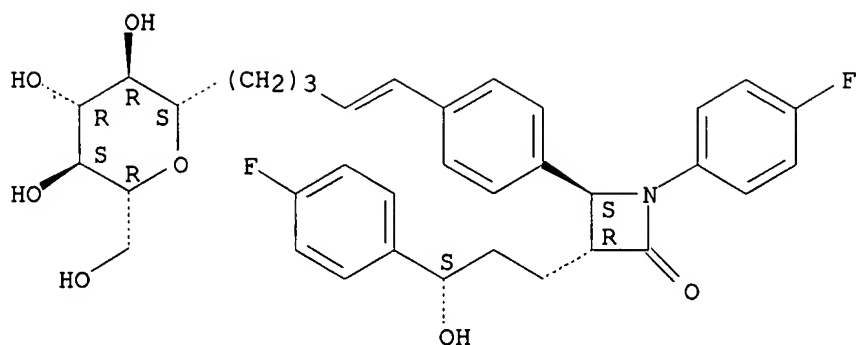


RN 452068-35-8 CAPLUS

CN D-glycero-D-gulo-Undec-1-enitol, 6,10-anhydro-1,2,3,4,5-pentadeoxy-1-[4-  
[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-  
oxo-2-azetidiny]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

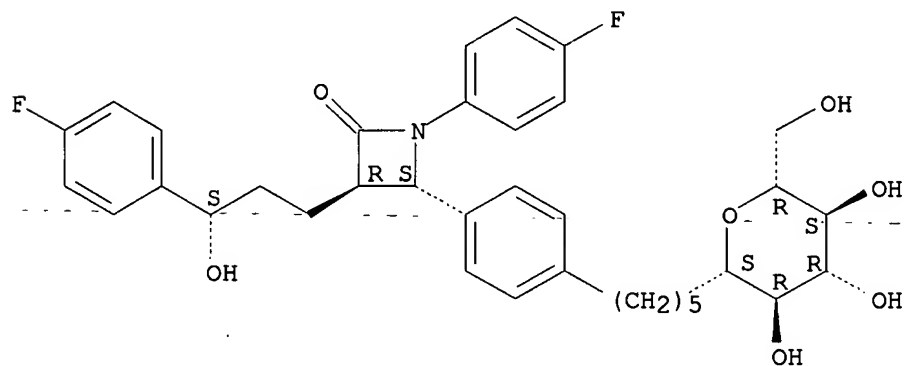
Double bond geometry unknown.



RN 452068-36-9 CAPLUS

CN D-glycero-D-gulo-Undecitol, 6,10-anhydro-1,2,3,4,5-pentadeoxy-1-[4-[(2S,3R)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]- (9CI) (CA INDEX NAME)

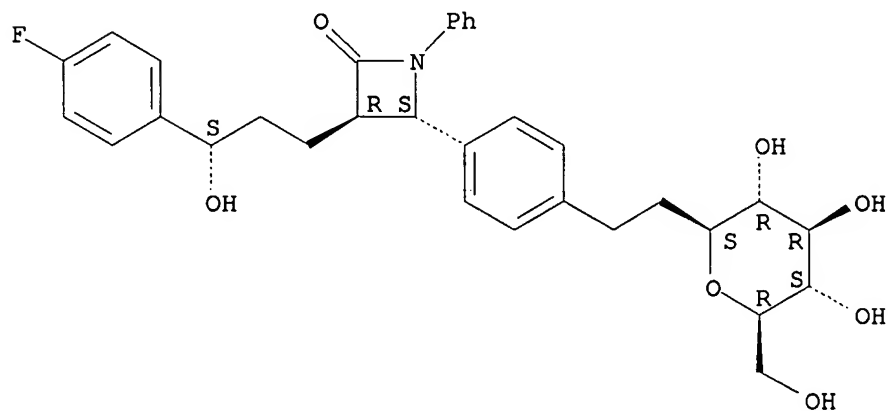
Absolute stereochemistry. Rotation (-).



RN 452068-37-0 CAPLUS

CN D-glycero-D-gulo-Octitol, 3,7-anhydro-1,2-dideoxy-1-[4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-1-phenyl-2-azetidinyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

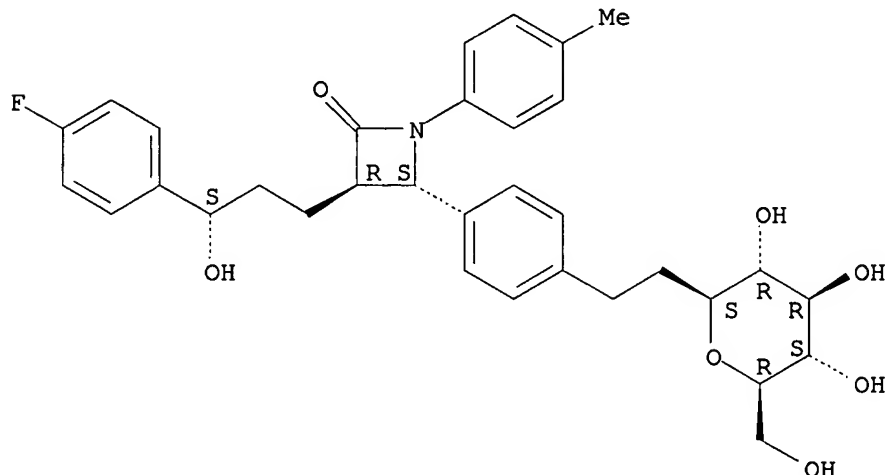




RN 452068-38-1 CAPLUS

CN D-glycero-D-gulo-Octitol, 3,7-anhydro-1,2-dideoxy-1-[4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-1-(4-methylphenyl)-4-oxo-2-azetidinyl]phenyl]- (9CI) (CA INDEX NAME)

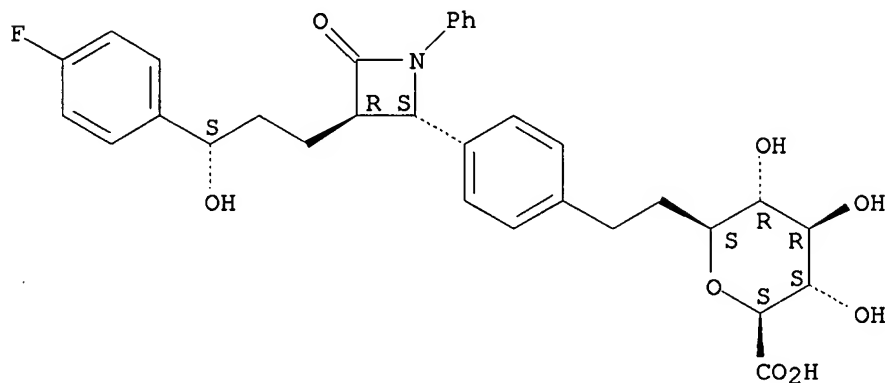
Absolute stereochemistry. Rotation (-).



RN 452068-93-8 CAPLUS

CN L-glycero-L-gulo-Octonic acid, 2,6-anhydro-7,8-dideoxy-8-[4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-1-phenyl-2-azetidinyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



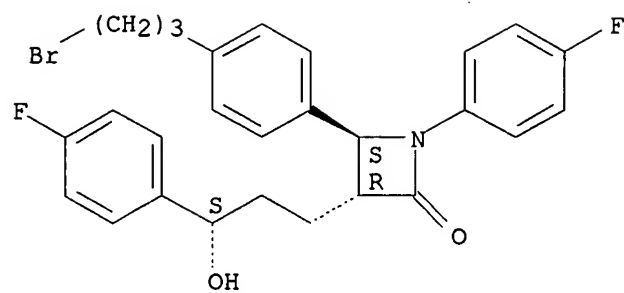
IT 452068-69-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of  $\beta$ -lactam compds. as serum cholesterol-lowering agents)

RN 452068-69-8 CAPLUS

CN 2-Azetidinone, 4-[4-(3-bromopropyl)phenyl]-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

10

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:574926 CAPLUS

DOCUMENT NUMBER: 137:135094

TITLE: The use of substituted azetidinone compounds for the treatment of sitosterolemia

INVENTOR(S): Davis, Harry R.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXXD2

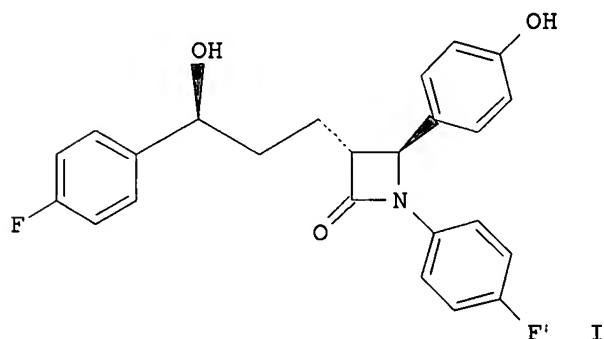
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

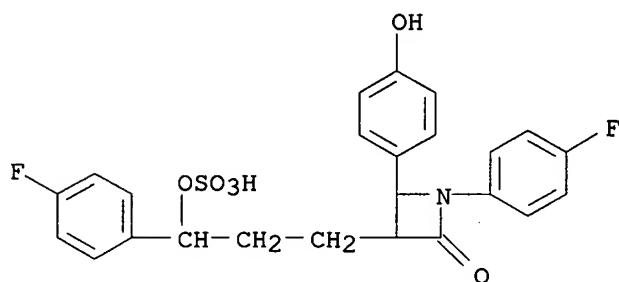
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058696	A2	20020801	WO 2002-US1195	20020125
WO 2002058696	A3	20030313		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2002169134	A1	20021114	US 2002-57629	20020125
PRIORITY APPLN. INFO.:			US 2001-264645P	P 20010126
OTHER SOURCE(S):	MARPAT 137:135094			
GI				

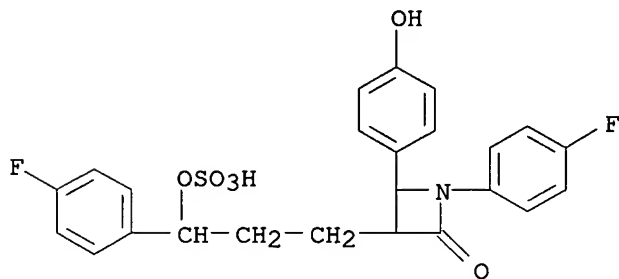


AB The invention discloses the use of sterol absorption-inhibiting compds., pharmaceutical compns. thereof, therapeutic combinations, and their use in combination with other lipid-lowering agents to treat or prevent sitosterolemia and/or to lower the concentration of sterol(s) other than cholesterol in plasma or tissue of a mammal. Methods of treating or preventing vascular disease and coronary events also are provided. The methodol. and compns. of the invention use substituted azetidinone

compds., e.g. I (preparation described).  
 IT 438576-91-1 438576-91-1D, derivs. 438576-92-2  
 438576-92-2D, prodrug derivs. 444313-49-9  
 444313-50-2 444313-51-3 444313-53-5  
 444313-55-7 444313-57-9 444313-59-1  
 444313-60-4 444313-61-5 444313-62-6  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (azetidinone derivs. for treatment of sitosterolemia)  
 RN 438576-91-1 CAPLUS  
 CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-  
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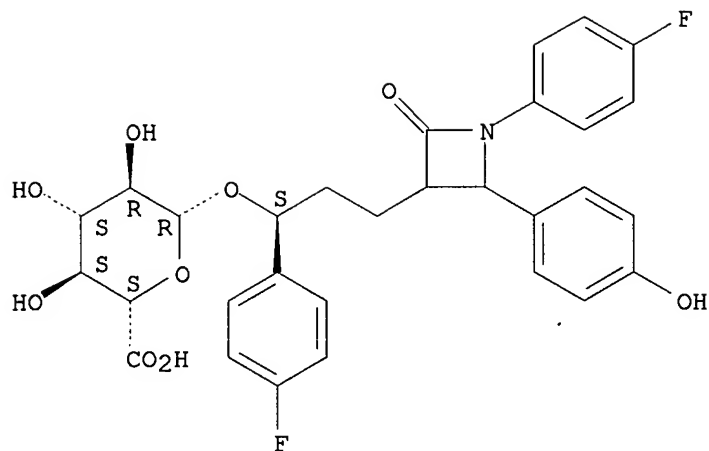


RN 438576-91-1 CAPLUS  
 CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-  
 (sulfoxy)propyl]-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 438576-92-2 CAPLUS  
 CN  $\beta$ -D-Glucopyranosiduronic acid, (1S)-1-(4-fluorophenyl)-3-[1-(4-  
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 INDEX NAME)

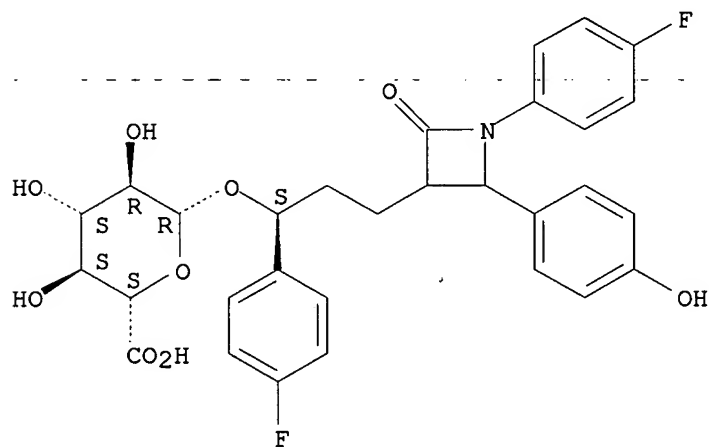
Absolute stereochemistry.



RN 438576-92-2 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, (1S)-1-(4-fluorophenyl)-3-[1-(4-fluorophenyl)-2-(4-hydroxyphenyl)-4-oxo-3-azetidiny]propyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 444313-49-9 CAPLUS

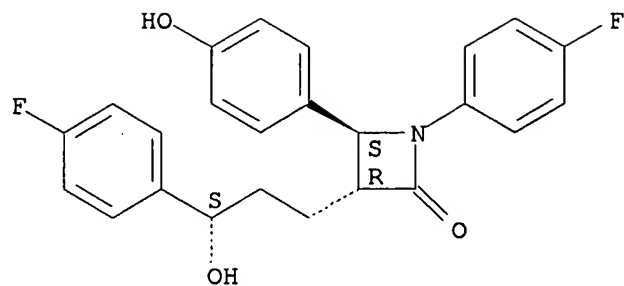
CN Butanoic acid, 2-methyl-, (1S,3R,7S,8S,8aR)-1,2,3,7,8,8a-hexahydro-3,7-dimethyl-8-[2-[(2R,4R)-tetrahydro-4-hydroxy-6-oxo-2H-pyran-2-yl]ethyl]-1-naphthalenyl ester, (2S)-, mixt. with (3R,4S)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone (9CI) (CA INDEX NAME)

CM 1

CRN 163222-33-1

CMF C24 H21 F2 N O3

Absolute stereochemistry. Rotation (-).

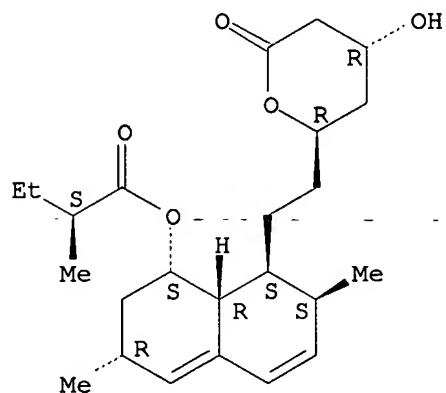


CM 2

CRN 75330-75-5

CMF C24 H36 O5

Absolute stereochemistry.



RN 444313-50-2 CAPLUS

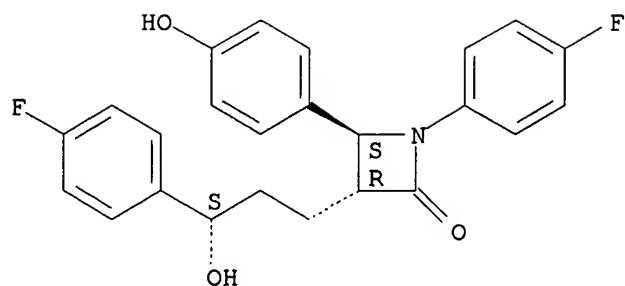
CN 1-Naphthaleneheptanoic acid, 1,2,6,7,8,8a-hexahydro- $\beta$ , $\delta$ ,6-trihydroxy-2-methyl-8-[(2S)-2-methyl-1-oxobutoxy]-, ( $\beta$ R, $\delta$ R,1S,2S,6S,8S,8aR)-, mixt. with (3R,4S)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone (9CI) (CA INDEX NAME)

CM 1

CRN 163222-33-1

CMF C24 H21 F2 N O3

Absolute stereochemistry. Rotation (-).

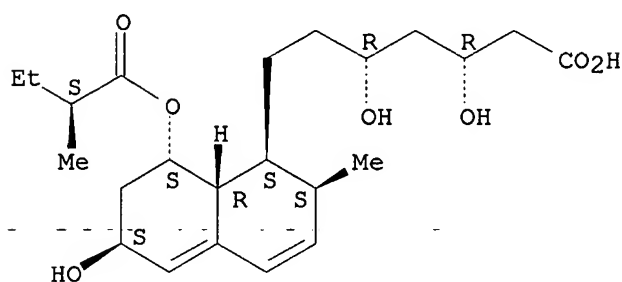


CM 2

CRN 81093-37-0

CMF C23 H36 O7

Absolute stereochemistry.



RN 444313-51-3 CAPLUS

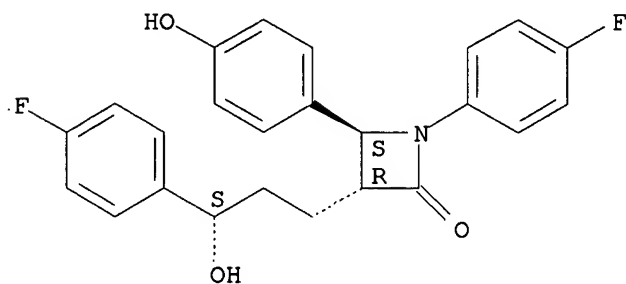
CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, (3R,5S,6E)-rel-, mixt. with (3R,4S)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone (9CI) (CA INDEX NAME)

CM 1

CRN 163222-33-1

CMF C24 H21 F2 N O3

Absolute stereochemistry. Rotation (-).

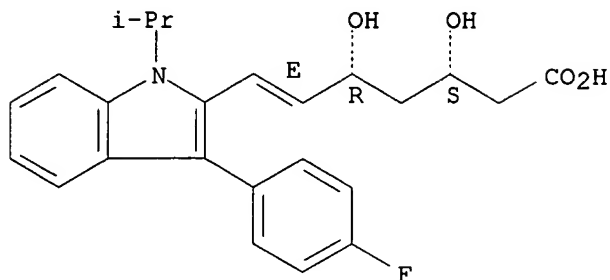


CM 2

CRN 93957-54-1

CMF C24 H26 F N O4

Relative stereochemistry.  
Double bond geometry as shown.



RN 444313-53-5 CAPLUS

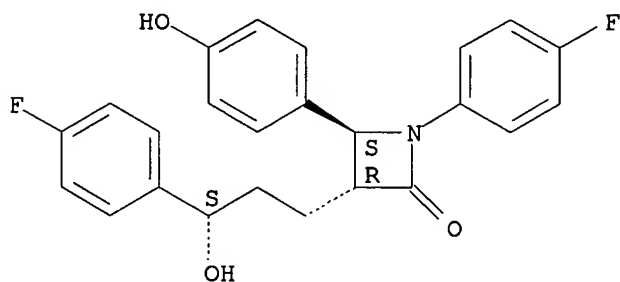
CN Butanoic acid, 2,2-dimethyl-, (1S,3R,7S,8S,8aR)-1,2,3,7,8,8a-hexahydro-3,7-dimethyl-8-[2-[(2R,4R)-tetrahydro-4-hydroxy-6-oxo-2H-pyran-2-yl]ethyl]-1-naphthalenyl ester, mixt. with (3R,4S)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone (9CI)  
(CA INDEX NAME)

CM 1

CRN 163222-33-1

CMF C24 H21 F2 N O3

Absolute stereochemistry. Rotation (-).



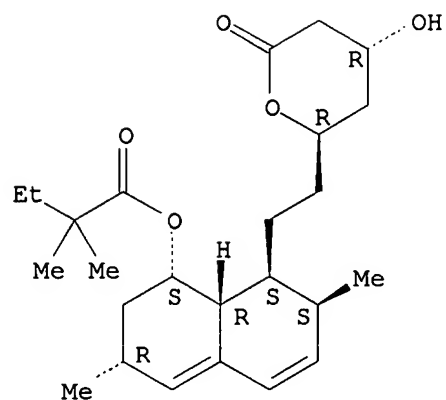
CM 2

CRN 79902-63-9

CMF C25 H38 O5

Absolute stereochemistry.



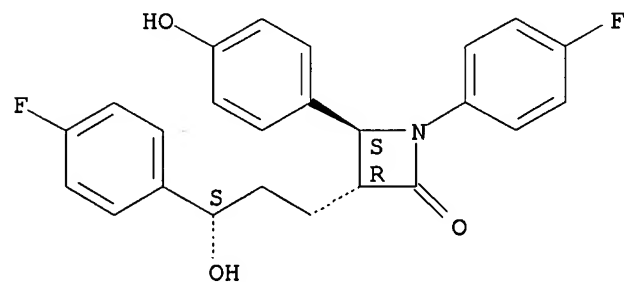


RN 444313-55-7 CAPLUS  
 CN 1H-Pyrrole-1-heptanoic acid, 2-(4-fluorophenyl)- $\beta$ , $\delta$ -dihydroxy-5-(1-methylethyl)-3-phenyl-4-[(phenylamino)carbonyl]-, ( $\beta$ R, $\delta$ R)-, mixt. with (3R,4S)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone (9CI) (CA INDEX NAME)

CM 1

CRN 163222-33-1  
 CMF C24 H21 F2 N O3

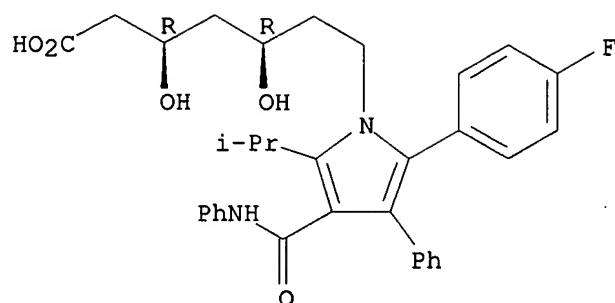
Absolute stereochemistry. Rotation (-).



CM 2

CRN 134523-00-5  
 CMF C33 H35 F N2 O5

Absolute stereochemistry.

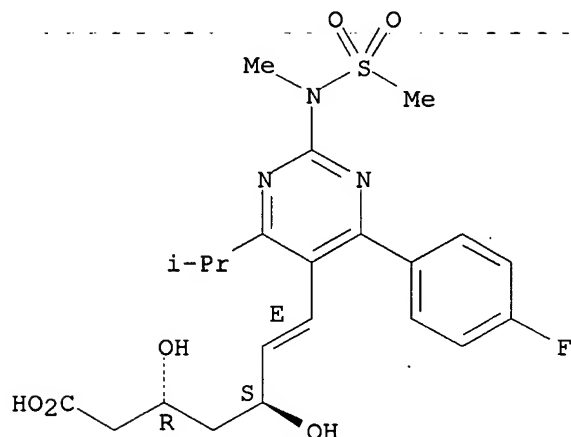


RN 444313-57-9 CAPLUS  
 CN 6-Heptenoic acid, 7-[4-(4-fluorophenyl)-6-(1-methylethyl)-2-[methyl(methylsulfonyl)amino]-5-pyrimidinyl]-3,5-dihydroxy-, (3R,5S,6E)-, mixt. with (3R,4S)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone (9CI) (CA INDEX NAME)

CM 1

CRN 287714-41-4  
 CMF C22 H28 F N3 O6 S

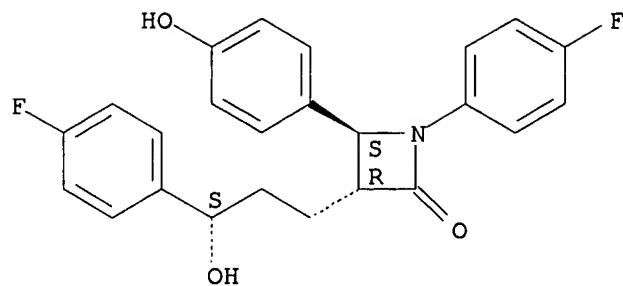
Absolute stereochemistry.  
 Double bond geometry as shown.



CM 2

CRN 163222-33-1  
 CMF C24 H21 F2 N O3

Absolute stereochemistry. Rotation (-).

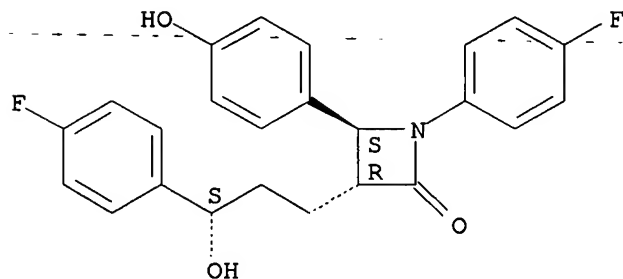


RN 444313-59-1 CAPLUS  
 CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-, (3R,4S)-, mixt. with (4R,6S)-6-[(1E)-2-[2-cyclopropyl-4-(4-fluorophenyl)-3-quinolinyl]ethenyl]tetrahydro-4-hydroxy-2H-pyran-2-one (9CI) (CA INDEX NAME)

CM 1

CRN 163222-33-1  
 CMF C24 H21 F2 N O3

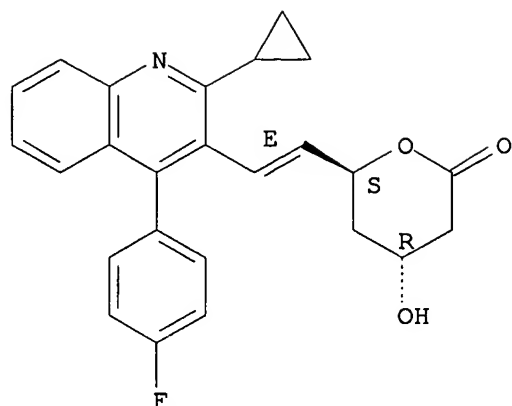
Absolute stereochemistry. Rotation (-).



CM 2

CRN 141750-63-2  
 CMF C25 H22 F N O3

Absolute stereochemistry.  
 Double bond geometry as shown.

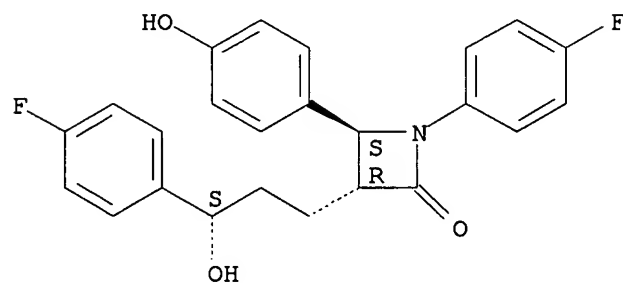


RN 444313-60-4 CAPLUS  
 CN Cholestyramine, mixt. with (3R,4S)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone (9CI)  
 (CA INDEX NAME)

CM 1

CRN 163222-33-1  
 CMF C24 H21 F2 N O3

Absolute stereochemistry. Rotation (-).



CM 2

CRN 11041-12-6  
 CMF Unspecified  
 CCI PMS, MAN

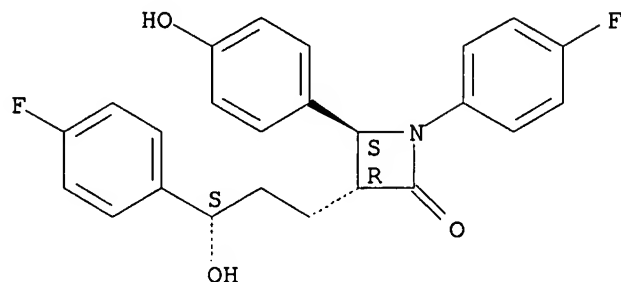
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 444313-61-5 CAPLUS  
 CN 1-Hexanaminium, N,N,N-trimethyl-6-(2-propenylamino)-, chloride, polymer with (chloromethyl)oxirane, 2-propen-1-amine and N-2-propenyl-1-decanamine, hydrochloride, mixt. with (3R,4S)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone (9CI)  
 (CA INDEX NAME)

CM 1

CRN 163222-33-1  
CMF C24 H21 F2 N O3

Absolute stereochemistry. Rotation (-).



CM 2

CRN 182815-44-7  
CMF (C13 H27 N . C12 H27 N2 . C3 H7 N . C3 H5 Cl O . Cl)x . x Cl H

CM 3

CRN 182815-43-6  
CMF (C13 H27 N . C12 H27 N2 . C3 H7 N . C3 H5 Cl O . Cl)x  
CCI - PMS

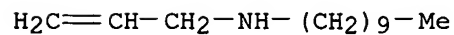
CM 4

CRN 182815-42-5  
CMF C12 H27 N2 . Cl



CM 5

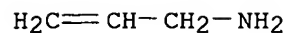
CRN 92162-19-1  
CMF C13 H27 N



CM 6

CRN 107-11-9

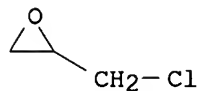
CMF C3 H7 N



CM 7

CRN 106-89-8

CMF C3 H5 Cl O



RN 444313-62-6 CAPLUS

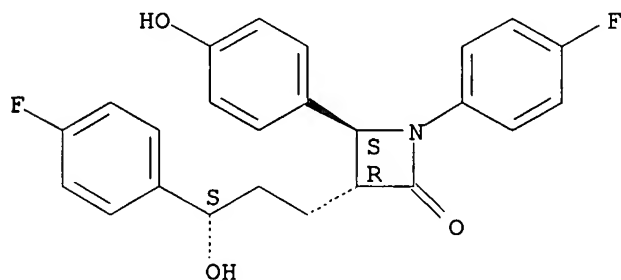
CN Colestipol, mixt. with (3R,4S)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone (9CI)  
(CA INDEX NAME)

CM 1

CRN 163222-33-1

CMF C24 H21 F2 N O3

Absolute stereochemistry. Rotation (-).



CM 2

CRN 50925-79-6

CMF Unspecified

CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L4 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:487576 CAPLUS

DOCUMENT NUMBER: 137:41758

TITLE: Sugar-substituted 2-azetidinones useful as  
hypocholesterolemic agents and in the treatment of  
atherosclerosis

INVENTOR(S): Ghosal, Anima; Zbaida, Shmuel; Chowdhury, Swapan K.;  
Iannucci, Robert M.; Feng, Wenqing; Alton, Kevin B.;  
Patrick, James E.; Davis, Harry R.  
PATENT ASSIGNEE(S): Schering Corporation, USA  
SOURCE: PCT Int. Appl., 33 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050090	A1	20020627	WO 2001-US49127	20011217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002031049	A5	20020701	AU 2002-31049	20011217
US 2002137690	A1	20020926	US 2001-23295	20011217
PRIORITY APPLN. INFO.:			US 2000-256875P	P 20001220
			WO 2001-US49127	W 20011217

OTHER-SOURCE(S):- MARPAT 137:41758

AB Hypocholesterolemic sugar-substituted 2-azetidinone compds. are disclosed, as are a method of lowering cholesterol by administering these compds., pharmaceutical compns. containing them, and the combination of a sugar-substituted 2-azetidinone cholesterol-lowering agent and a cholesterol biosynthesis inhibitor for the treatment and prevention of atherosclerosis.

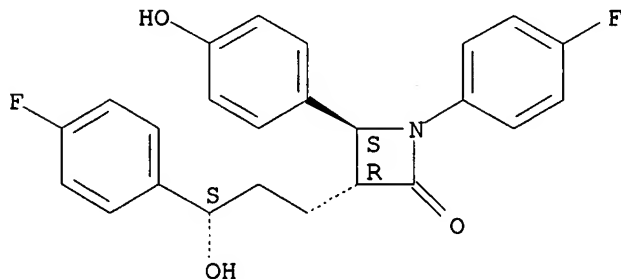
IT **438576-93-3**

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction; sugar-substituted 2-azetidinones useful as hypocholesterolemic and in atherosclerosis treatment)

RN 438576-93-3 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-, labeled with carbon-14, (3R,4S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



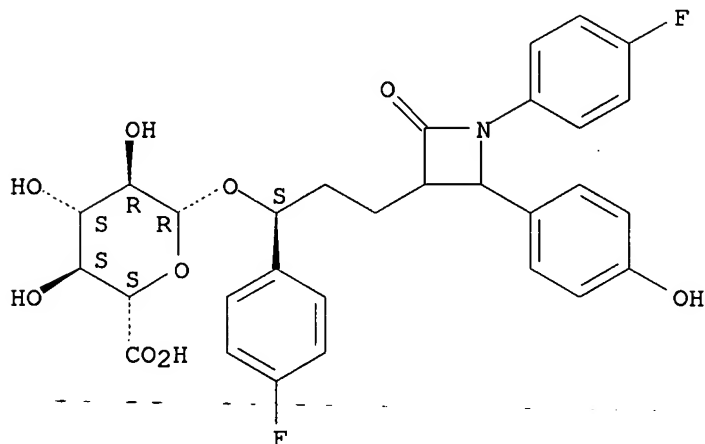
## IT 438576-92-2P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(sugar-substituted 2-azetidinones useful as hypocholesterolemics and in atherosclerosis treatment)

RN 438576-92-2 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, (1S)-1-(4-fluorophenyl)-3-[1-(4-fluorophenyl)-2-(4-hydroxyphenyl)-4-oxo-3-azetidiny]propyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

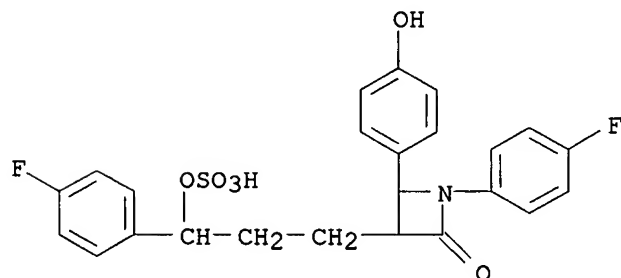


## IT 438576-91-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sugar-substituted 2-azetidinones useful as hypocholesterolemics and in atherosclerosis treatment)

RN 438576-91-1 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-(sulfooxy)propyl]-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2003 ACS

30/05/2003&lt;L&gt; 02:53



ACCESSION NUMBER: 2002:487559 CAPLUS  
 DOCUMENT NUMBER: 137:63115  
 TITLE: Preparation of diphenylazetidinone derivatives as hypolipidemic agents  
 INVENTOR(S): Glombik, Heiner; Kramer, Werner; Flohr, Stefanie; Frick, Wendelin; Heuer, Hubert; Jaehne, Gerhard; Lindenschmidt, Andreas; Schaefer, Hans-Ludwig  
 PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany  
 SOURCE: PCT Int. Appl., 67 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050068	A1	20020627	WO 2001-EP14532	20011211
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
DE 10064402	A1	20020627	DE 2000-10064402	20001221
AU 2002019173	A5	20020701	AU 2002-19173	20011211
US 2002128252	A1	20020912	US 2001-21028	20011219
US 6498156	B2	20021224		
PRIORITY APPLN. INFO.:			DE 2000-10064402 A	20001221
			DE 2001-10154520 A	20011107
			WO 2001-EP14532 W	20011211
OTHER SOURCE(S):	MARPAT 137:63115			
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The compds. are suited for use e.g. as hypolipidemic drugs. The invention discloses preparation of diphenylazetidinone derivs. such as I [R1, R2, R3, R4, R5, R6 = C0-C30-alkylene-L {optionally containing O, CO, CH:CH, C.tplbond.C, N(alkyl), N(alkylphenyl), NH}, H, F, Cl, Br, I, CF3, NO2, CN, CO2H, CO2(alkyl), CONH2, CONH(alkyl), CON(alkyl)2, alkyl, alkenyl, alkynyl, O-alkyl, SO2NH2, SO2NH(alkyl), SO2N(alkyl)2, S-(alkyl), SO(alkyl), (un)substituted S(CH2)nPh, SO(CH2)nPh, SO2(alkyl), SO2(CH2)nPh, NH2, NH(alkyl), N(alkyl)2, NH(acyl), (un)substituted Ph, O(CH2)nPh; n = 0-6; L = II; R7, R9, R10 = Me, Et, Pr, butyl; R8 = H, OH, NH2, NH(alkyl)], and their physiol. acceptable salts, for their use as hypolipidemic agents. Thus, 1,2-diphenylazetidinone derivative III·trifluoroacetate (IV) was prepared via a multistep synthetic sequence starting from 7-[3-(3-butyl-7-dimethylamino-3-ethyl-4-hydroxy-1,1-dioxo-2,3,4,5-tetrahydro-1H-benzo[b]thiepin-5-yl)-phenylcarbamoyl]-heptanoic acid and 4-(4-aminomethylphenyl)-1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-

hydroxyphenyl]-azetidin-2-one. Azetidinone IV was tested for its cholesterol lowering ability [ED50 = 0.01 mg/mouse].

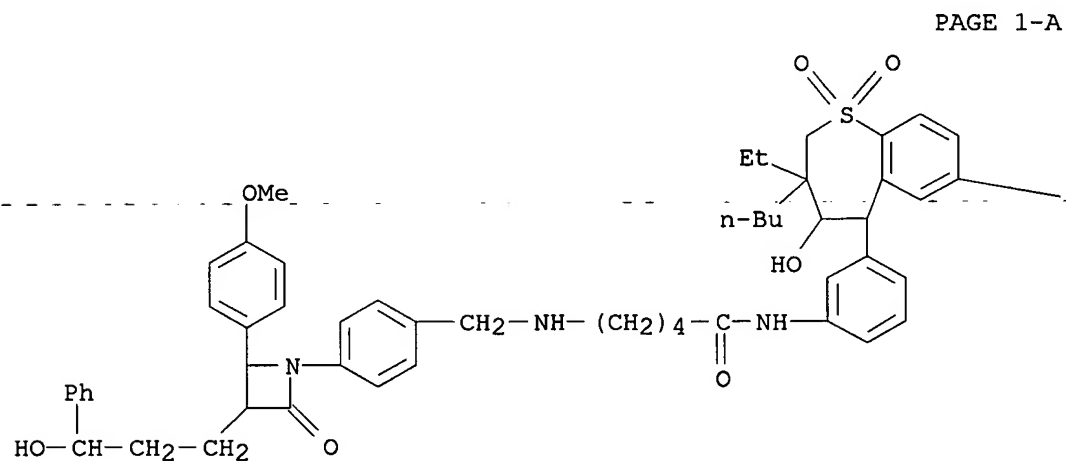
IT 439113-82-3P 439113-89-0P 439113-91-4P  
 439113-92-5P 439113-93-6P 439113-96-9P  
 439113-98-1P 439114-01-9P 439114-03-1P  
 439114-06-4P 439114-08-6P 439114-11-1P  
 439114-16-6P 439114-20-2P 439114-22-4P  
 439114-26-8P 439114-29-1P 439114-36-0P  
 439114-38-2P 439114-39-3P 439114-40-6P  
 439120-25-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diphenylazetidinone derivs. as hypolipidemics)

RN 439113-82-3 CAPLUS

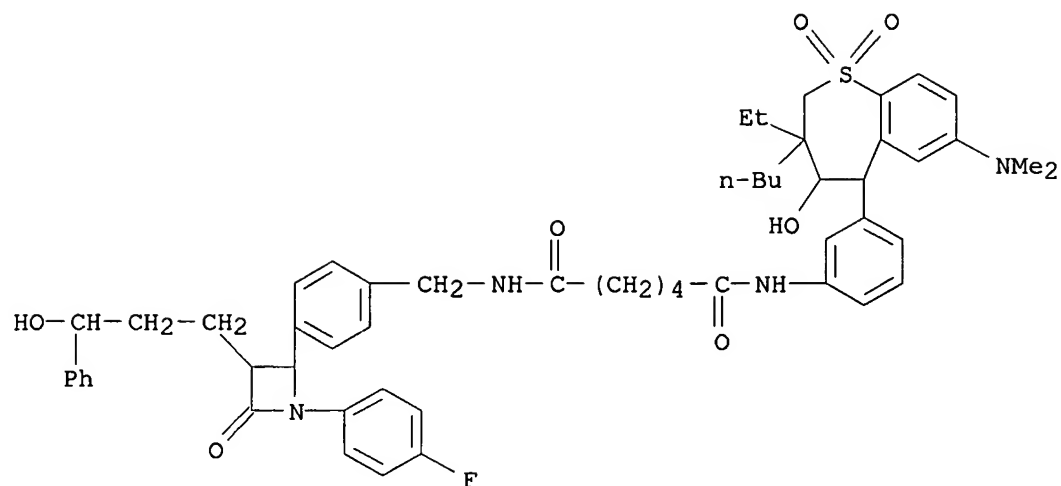
CN Pentanamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-5-[[[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]phenyl]methyl]amino]-(9CI) (CA INDEX NAME)



—NMe<sub>2</sub>

RN 439113-89-0 CAPLUS

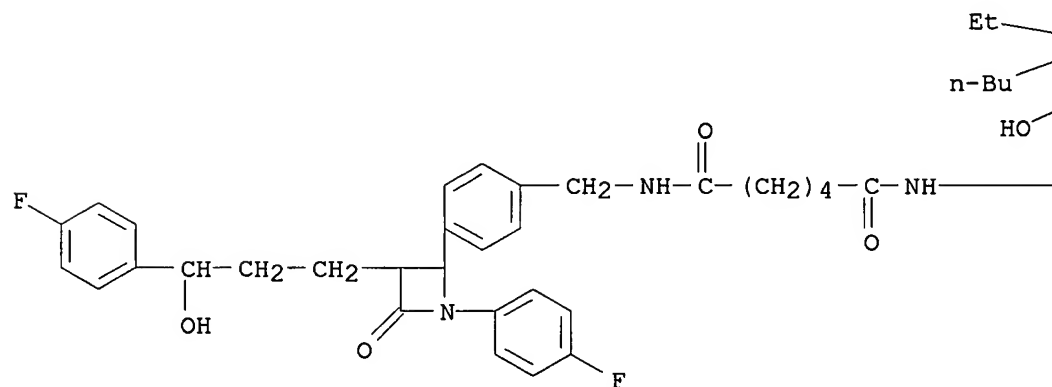
CN Hexanediamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-N'-[[4-[1-(4-fluorophenyl)-3-(3-hydroxy-3-phenylpropyl)-4-oxo-2-azetidinyl]phenyl]methyl]-(9CI) (CA INDEX NAME)

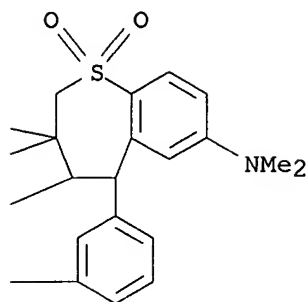


RN 439113-91-4 CAPLUS

CN Hexanedi-1,5-diamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxo-1-benzothiepin-5-yl]phenyl]-N'-[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

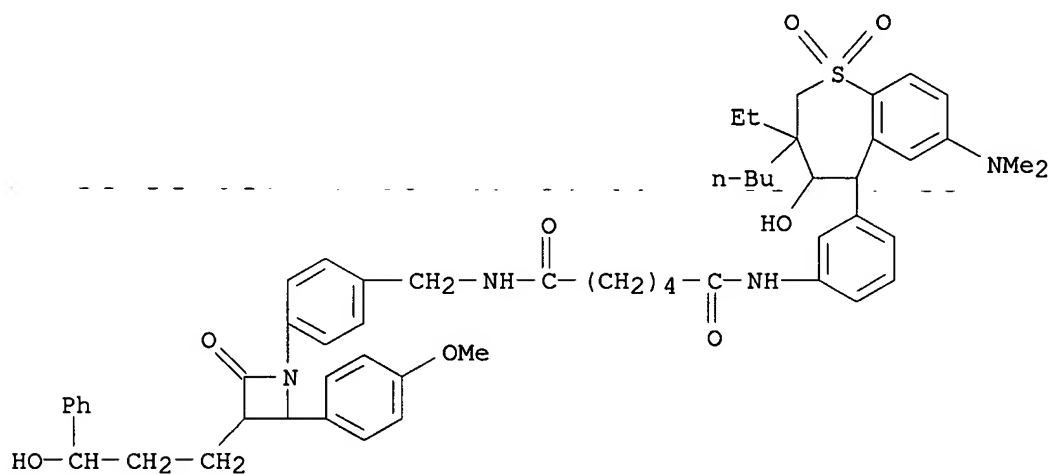
PAGE 1-A





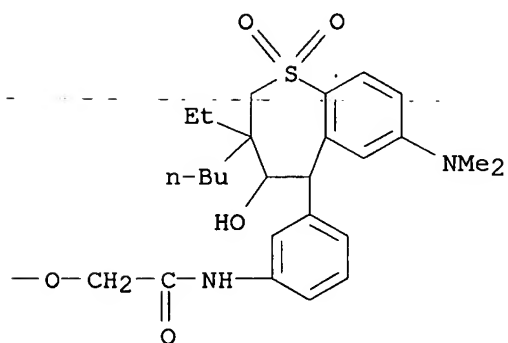
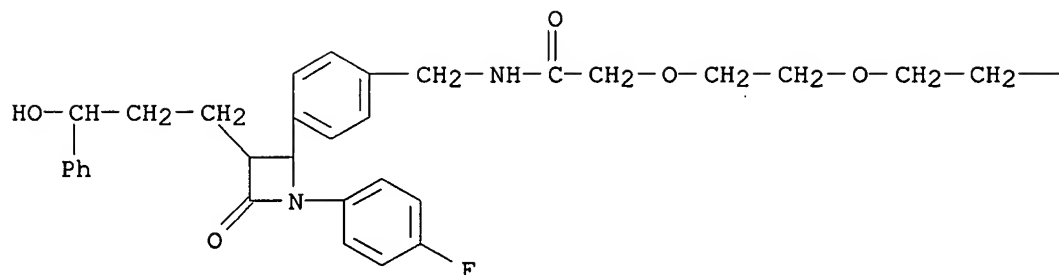
RN 439113-92-5 CAPLUS

CN Hexanediamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-N'-[[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]phenyl]methyl]- (9CI)  
(CA INDEX NAME)



RN 439113-93-6 CAPLUS

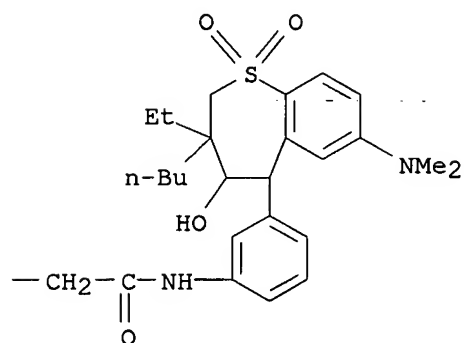
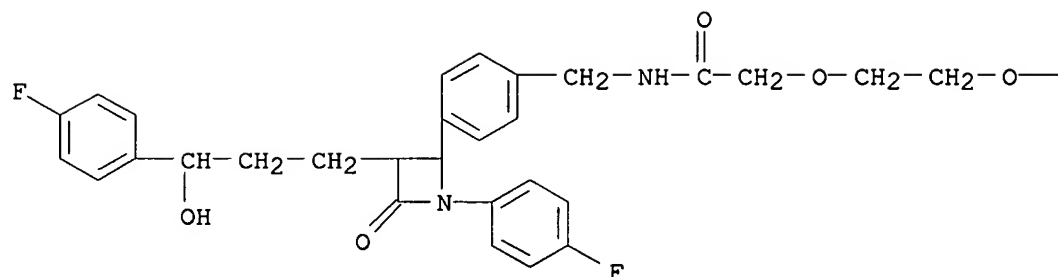
CN 5,8,11-Trioxa-2-azatridecan-13-amide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-1-[4-[1-(4-fluorophenyl)-3-(3-hydroxy-3-phenylpropyl)-4-oxo-2-azetidiny]phenyl]-3-oxo- (9CI) (CA INDEX NAME)



RN 439113-96-9 CAPLUS  
 CN Acetamide, 2-[2-[2-[[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]amino]-2-oxoethoxy]ethoxy]-N-[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

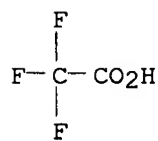
CRN 439113-95-8  
 CMF C55 H64 F2 N4 O9 S



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439113-98-1 CAPLUS

CN Acetamide, 2-[2-[2-[[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]amino]-2-oxoethoxy]ethoxy]-N-[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]methyl]-, mono(trifluoroacetate)

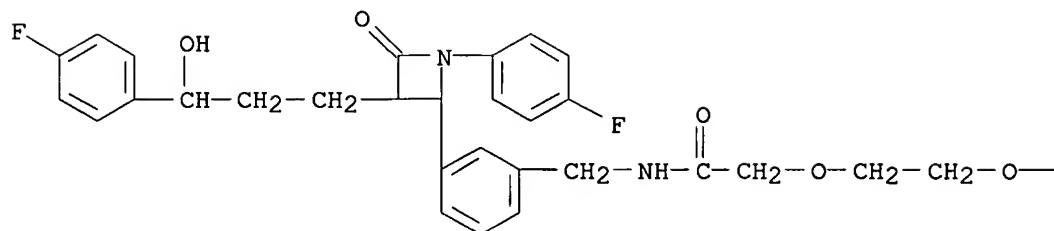
(salt) (9CI) (CA INDEX NAME)

CM 1

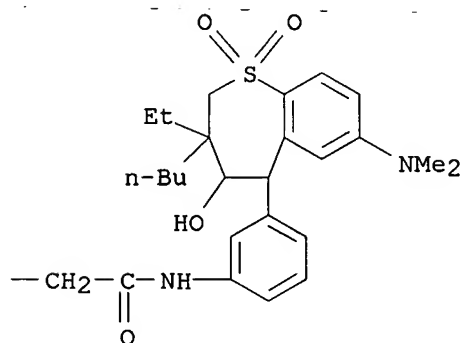
CRN 439113-97-0

CMF C55 H64 F2 N4 O9 S

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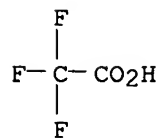
PAGE 1-B



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439114-01-9 CAPLUS

CN 5,8,11-Trioxa-2-azatridecan-13-amide, N-[3-[3-butyl-7-(dimethylamino)-3-

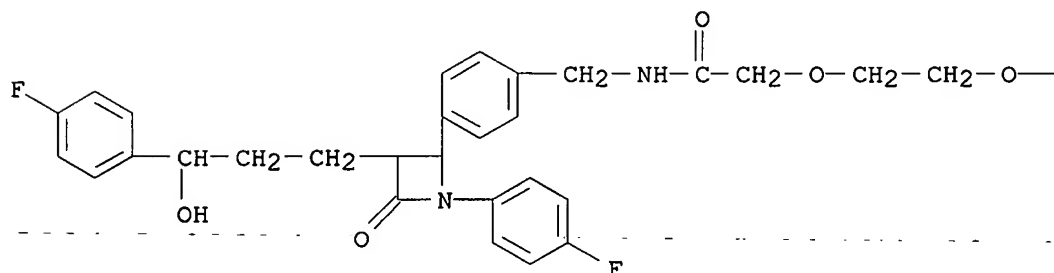
ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-  
1-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-  
azetidiny]phenyl]-3-oxo-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX  
NAME)

CM 1

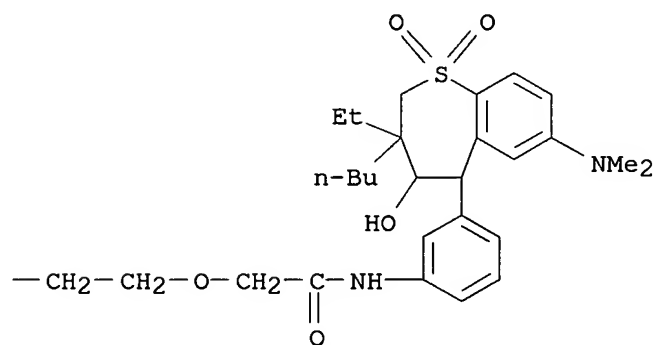
CRN 439114-00-8

CMF C57 H68 F2 N4 O10 S

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PAGE 1-B

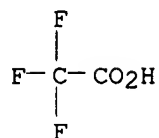


CM 2

CRN 76-05-1

CMF C2 H F3 O2





RN 439114-03-1 CAPLUS

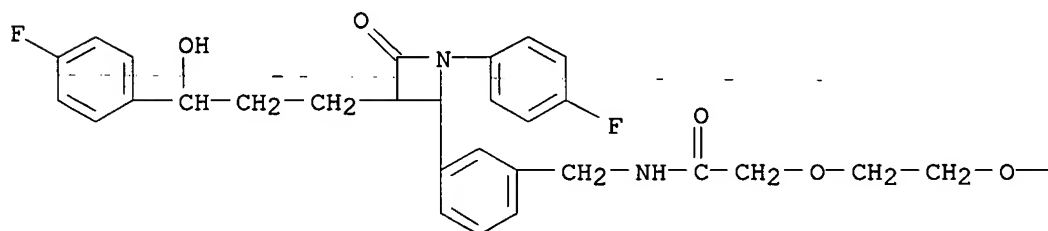
CN 5,8,11-Trioxa-2-azatridecan-13-amide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-1-[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]-3-oxo-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

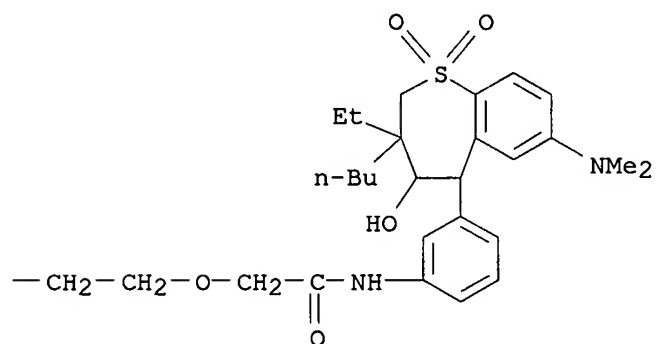
CRN 439114-02-0

CMF C57 H68 F2 N4 O10 S

PAGE 1-A



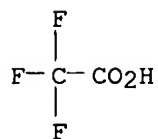
PAGE 1-B



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439114-06-4 CAPLUS

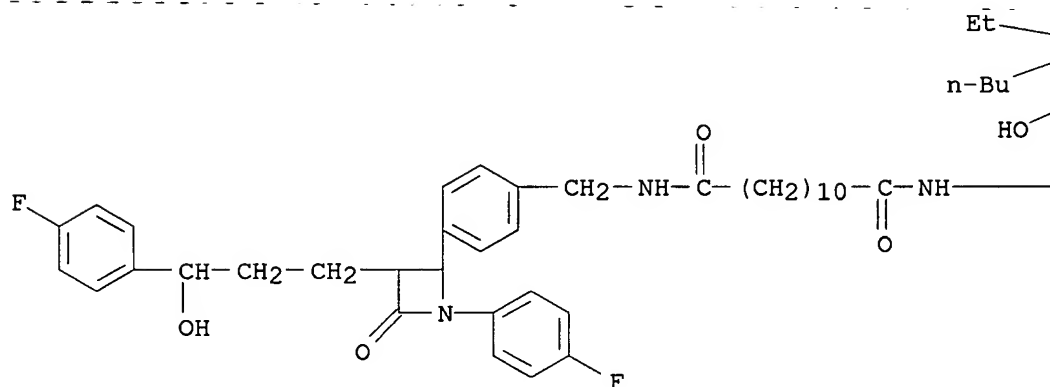
CN Dodecanediamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-N'-[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

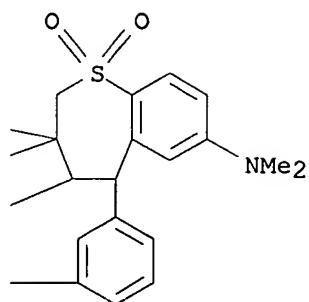
CM 1

CRN 439114-05-3

CMF C61 H76 F2 N4 O7 S

PAGE 1-A

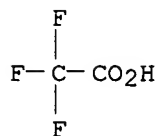




CM 2

CRN 76-05-1

CMF C2 H F3 O2

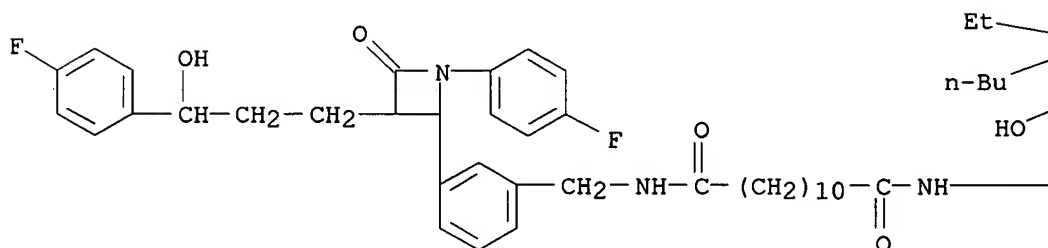


RN 439114-08-6 CAPLUS  
 CN Dodecanediamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-N'-[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

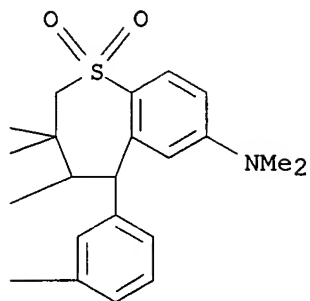
CM 1

CRN 439114-07-5

CMF C61 H76 F2 N4 O7 S



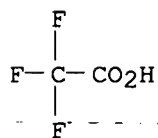
PAGE 1-B



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439114-11-1 CAPLUS

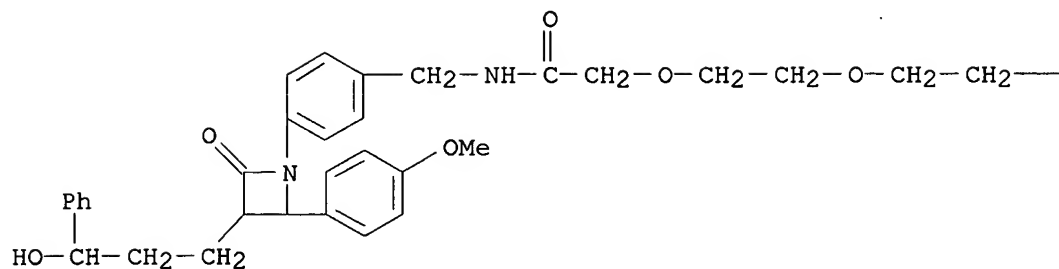
CN 5,8,11-Trioxa-2-azatridecan-13-amide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-1-[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]phenyl]-3-oxo-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

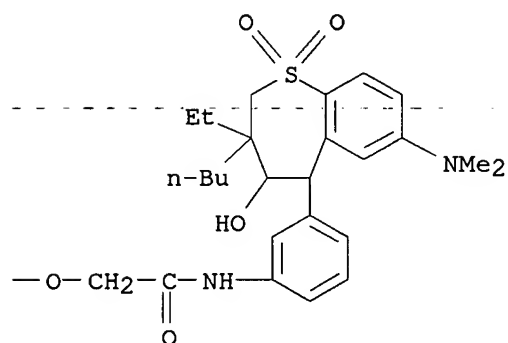
CRN 439114-10-0

CMF C58 H72 N4 O11 S

PAGE 1-A



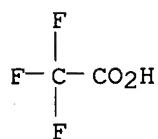
PAGE 1-B



CM 2

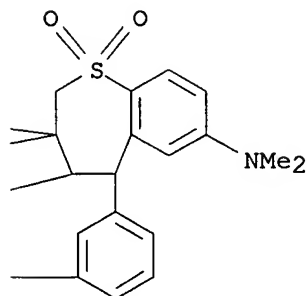
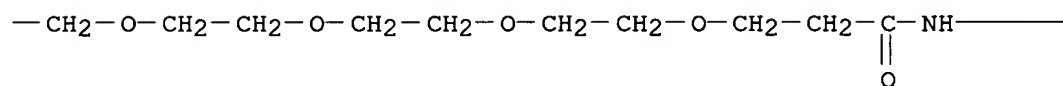
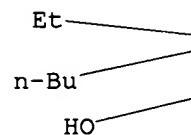
CRN 76-05-1

CMF C2 H F3 O2



RN 439114-16-6 CAPLUS

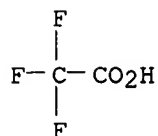
CN 4,7,10,13,16-Pentaoxanonadecanedi-  
 amide, N-[3-[3-butyl-7-(dimethylamino)-3-  
 ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-  
 N'-[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-  
 azetidiny]phenyl]methyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX

O=C1C(Cc2ccccc2CNC(=O)CCCOCC)(C(F)C3=CC=CC=C3)N1C(=O)CC(O)c4ccc(F)cc4

CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439114-20-2 CAPLUS

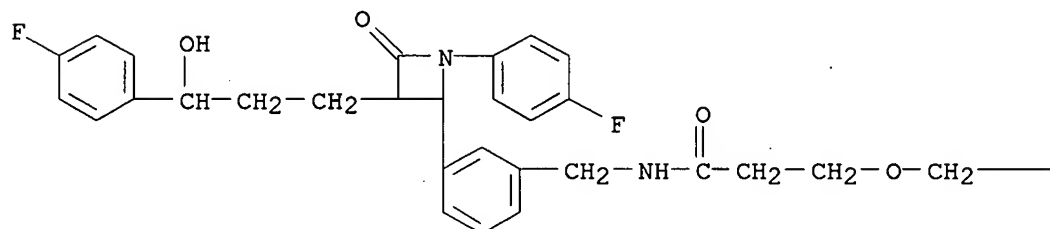
CN 4,7,10,13,16,19,22-Heptaioxapentacosanedi-  
 amide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-N'-[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

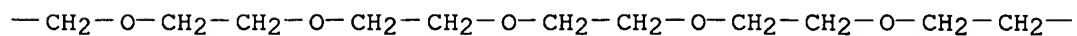
CRN 439114-19-9

CMF C67 H88 F2 N4 O14 S

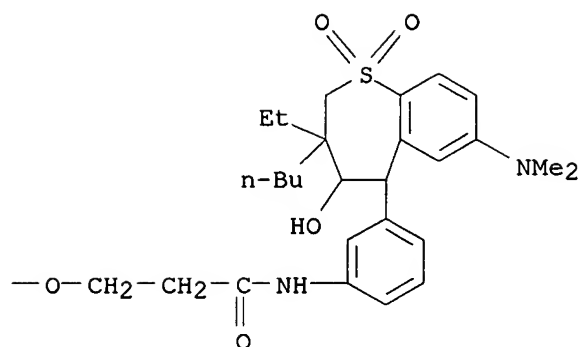
PAGE 1-A



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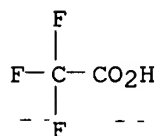
PAGE 1-C



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439114-22-4 CAPLUS

CN 4,7,10,13,16-Pentaoxanonadecanediamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-N'-[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

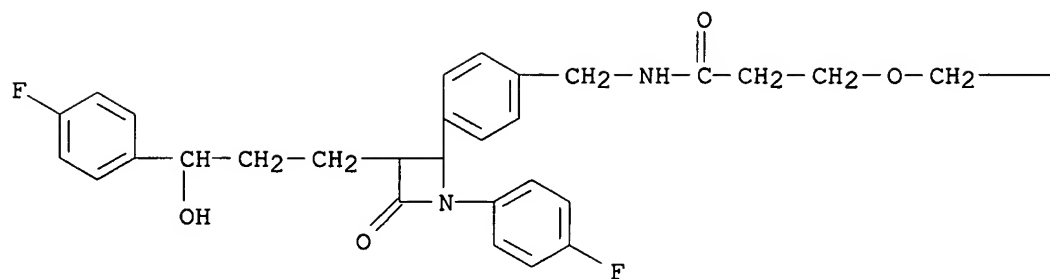
CM 1

CRN 439114-21-3

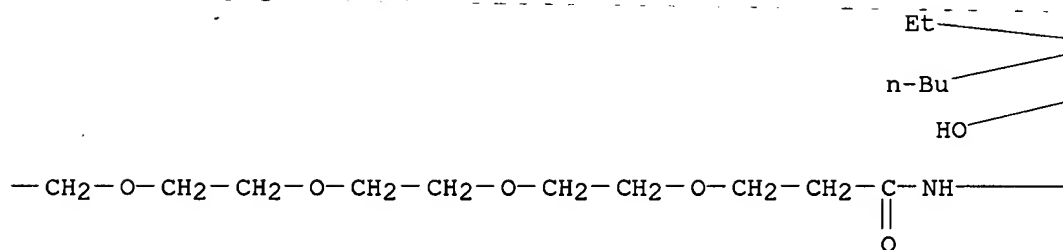
CMF C63 H80 F2 N4 O12 S



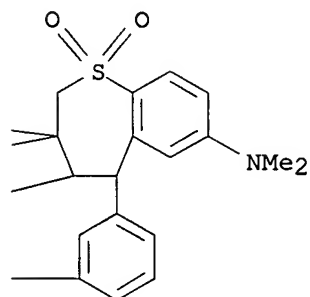
PAGE 1-A



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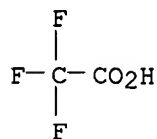
PAGE 1-C



CM 2

CRN 76-05-1

CMF C2 H F3 O2



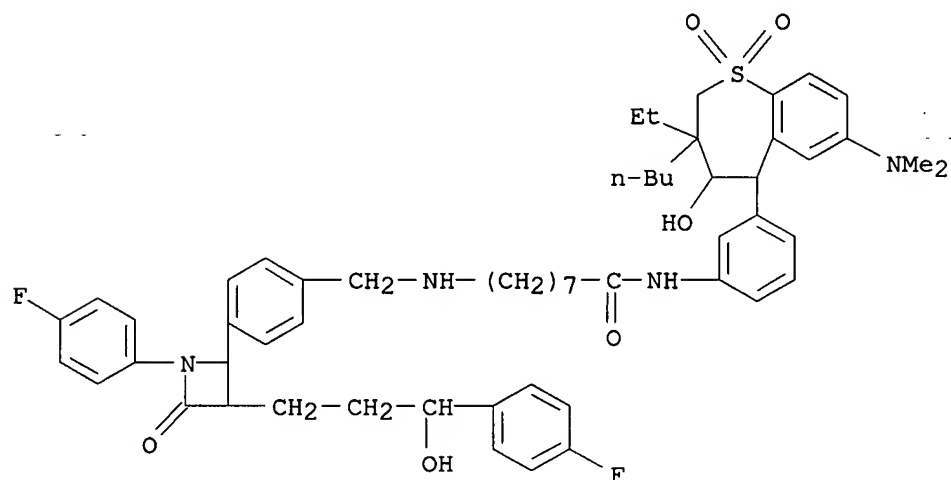
RN 439114-26-8 CAPLUS

CN Octanamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-8-[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 439114-25-7

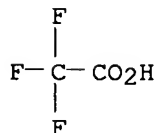
CMF C57 H70 F2 N4 O6 S



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439114-29-1 CAPLUS

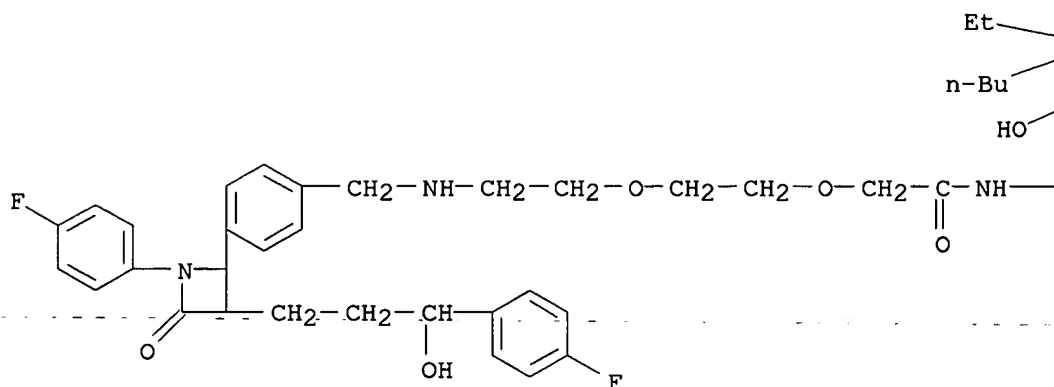
CN Acetamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-2-[2-[2-[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]ethoxy]ethoxy]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

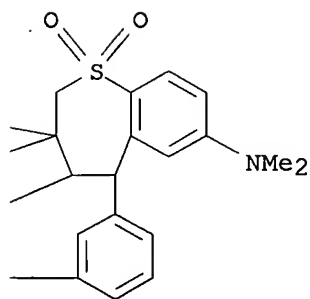
CRN 439114-28-0

CMF C55 H66 F2 N4 O8 S

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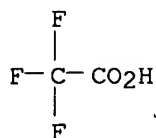
PAGE 1-B



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439114-36-0 CAPLUS

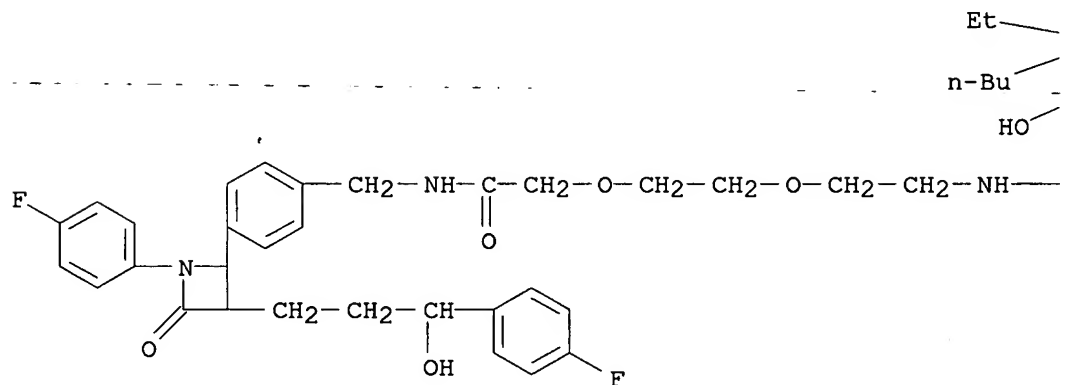
CN Acetamide, 2-[2-[2-[[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]amino]ethoxy]ethoxy]-N-[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

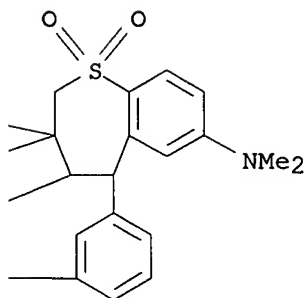
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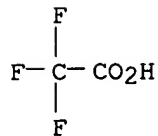
CMF C55 H66 F2 N4 O8 S

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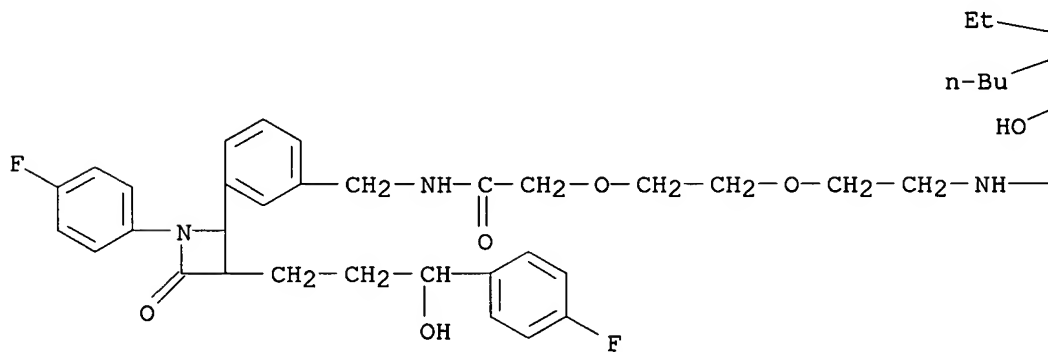


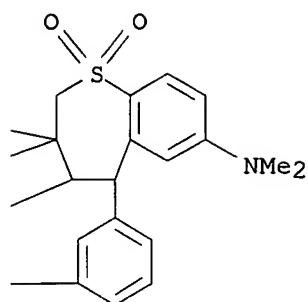


CM 1

CRN 439114-37-1  
CMF C55 H66 F2 N4 O8 S

PAGE 1-A

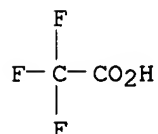




CM 2

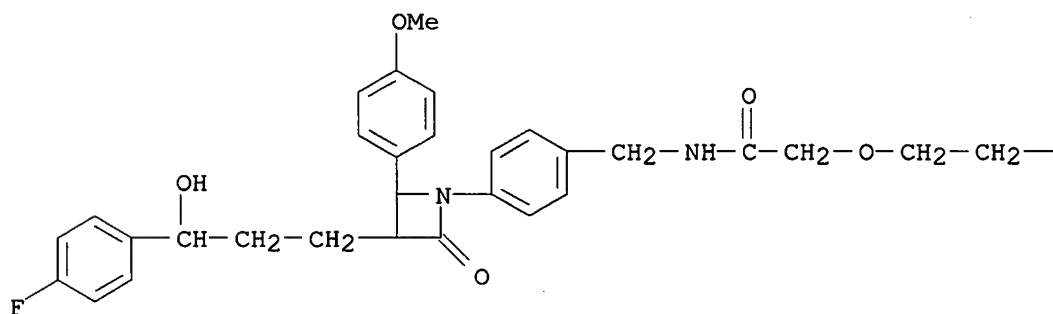
CRN 76-05-1

CMF C2 H F3 O2

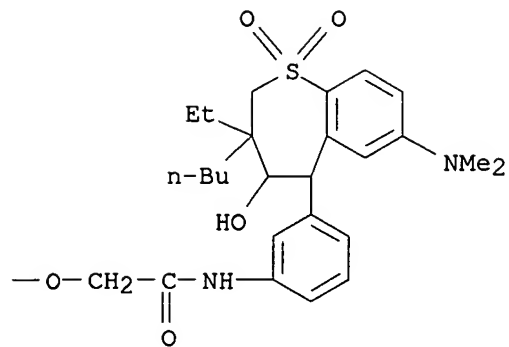


RN 439114-39-3 CAPLUS

CN Acetamide, 2-[2-[2-[[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]amino]-2-oxoethoxy]ethoxy]-N-[[4-[3-[3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]phenyl]methyl]- (9CI) (CA INDEX NAME)



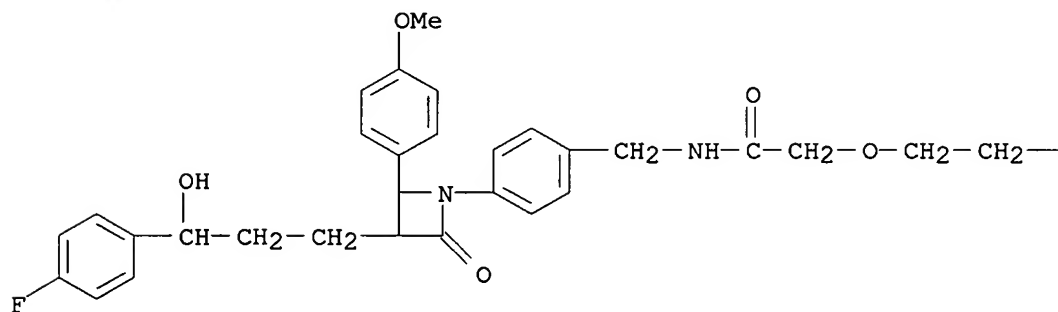
PAGE 1-B



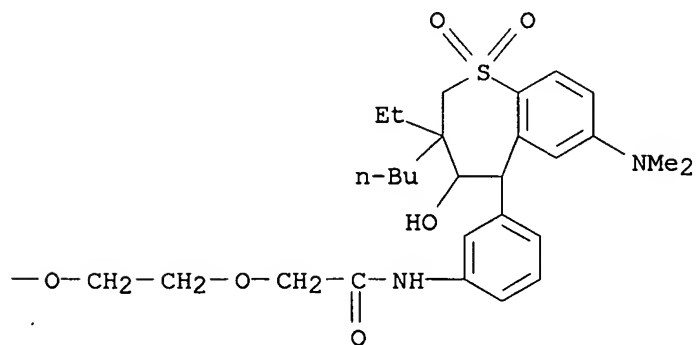
RN 439114-40-6 CAPLUS

CN 5,8,11-Trioxa-2-azatridecan-13-amide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-1-[4-[3-[3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidinyloxy]phenyl]-3-oxo- (9CI) (CA INDEX NAME)

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RN 439120-25-9 CAPLUS

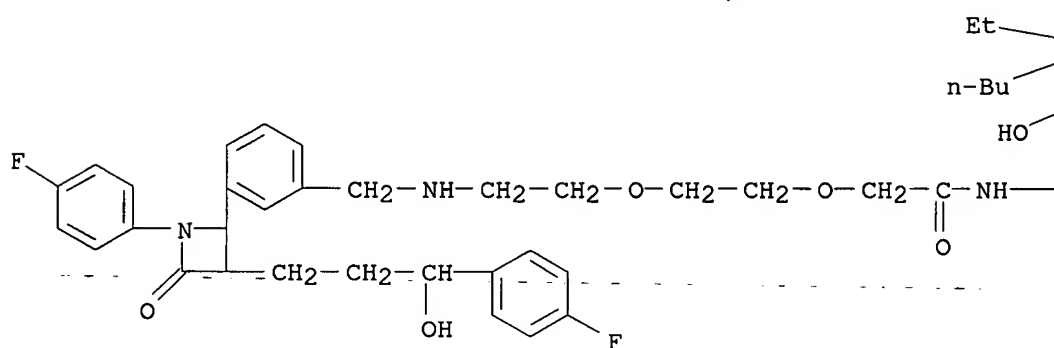
CN Acetamide, N-[3-[3-butyl-7-(dimethylamino)-3-ethyl-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenyl]-2-[2-[2-[[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]ethoxy]ethoxy]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

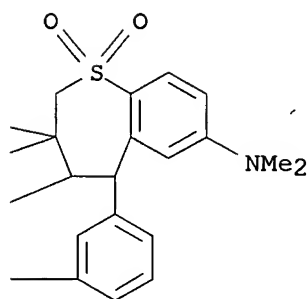
CRN 439120-24-8

CMF C55 H66 F2 N4 O8 S

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PAGE 1-B

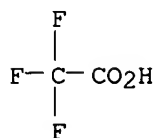


CM 2

CRN 76-05-1

CMF C2 H F3 O2





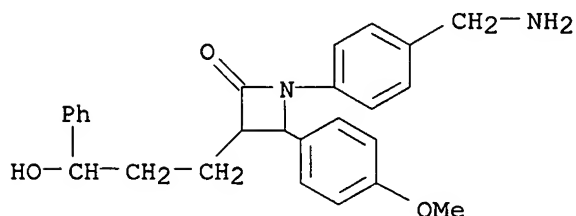
IT 402820-38-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of diphenylazetidinone derivs. as hypolipidemics)

RN 402820-38-6 CAPLUS

CN 2-Azetidinone, 1-[4-(aminomethyl)phenyl]-3-(3-hydroxy-3-phenylpropyl)-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



IT 439080-20-3P 439080-21-4P 439080-60-1P

439080-61-2P 439080-62-3P 439113-86-7P

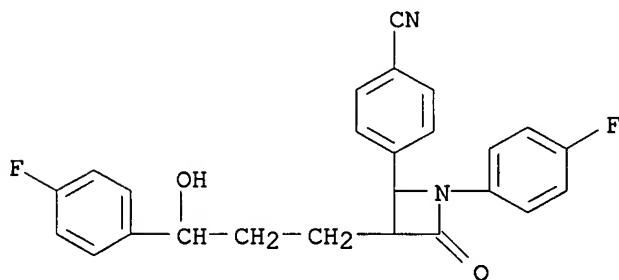
439113-87-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of diphenylazetidinone derivs. as hypolipidemics)

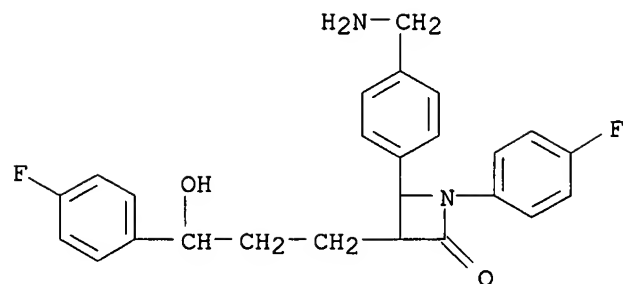
RN 439080-20-3 CAPLUS

CN Benzonitrile, 4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]- (9CI) (CA INDEX NAME)



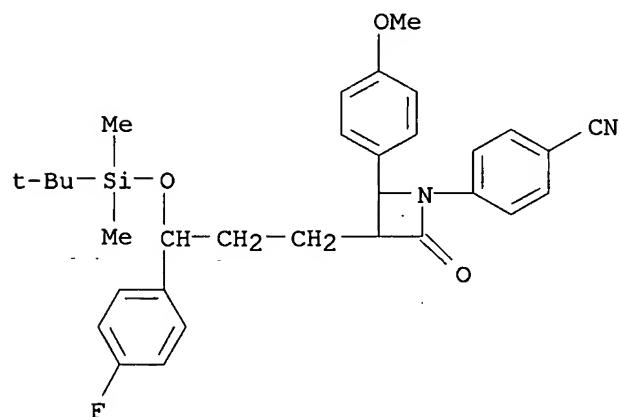
RN 439080-21-4 CAPLUS

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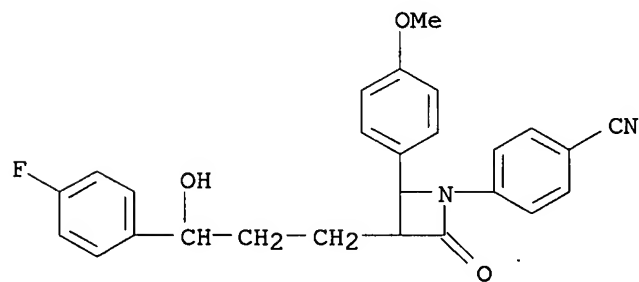
RN 439080-60-1 CAPLUS

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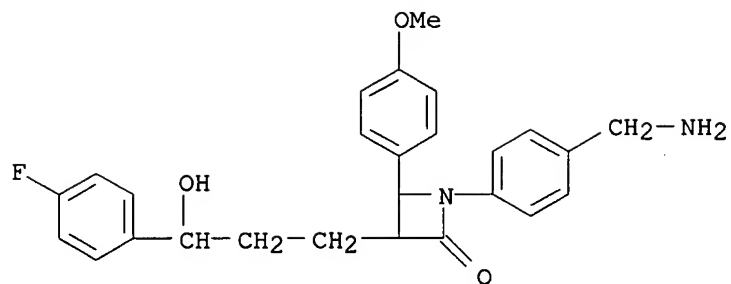
RN 439080-61-2 CAPLUS

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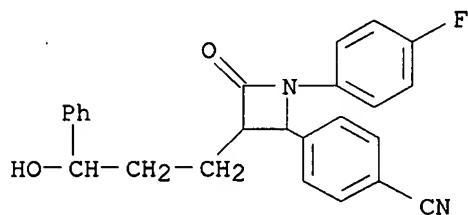
RN 439080-62-3 CAPLUS

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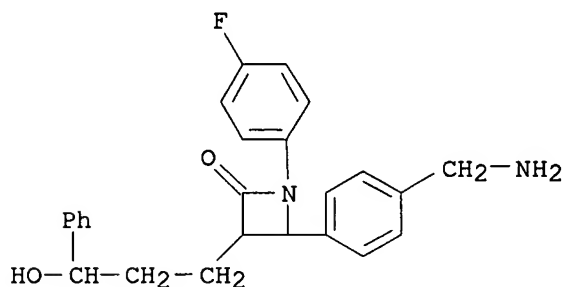
RN 439113-86-7 CAPLUS

CN Benzonitrile, 4-[1-(4-fluorophenyl)-3-(3-hydroxy-3-phenylpropyl)-4-oxo-2-azetidiny]- (9CI) (CA INDEX NAME)



RN 439113-87-8 CAPLUS

CN 2-Azetidinone, 4-[4-(aminomethyl)phenyl]-1-(4-fluorophenyl)-3-(3-hydroxy-3-phenylpropyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:487551 CAPLUS

DOCUMENT NUMBER: 137:63114

TITLE: Preparation of diphenylazetidinone derivatives and their use as hypolipidemic agents

INVENTOR(S): Glombik, Heiner; Kramer, Werner; Flohr, Stefanie; Frick, Wendelin; Heuer, Hubert; Jaehne, Gerhard; Lindenschmidt, Andreas; Schaefer, Hans-Ludwig

PATENT ASSIGNEE(S): Avantis Pharma Deutschland GmbH, Germany

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050060	A1	20020627	WO 2001-EP14533	20011211
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2002031688	A5	20020701	AU 2002-31688	20011211
US 2002128253	A1	20020912	US 2001-21044	20011219
PRIORITY APPLN. INFO.:			DE 2000-10064402 A	20001221
			DE 2001-10154518 A	20011107
			WO 2001-EP14533 W	20011211
OTHER SOURCE(S):			MARPAT 137:63114	
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention discloses preparation of diphenylazetidinone derivs. such as I [R1, R2, R3, R4, R5, R6 = C0-C30-alkylene-L {optionally containing O, CO, CH:CH, C.tplbond.C, N(alkyl), N(alkylphenyl), NH}, H, F, Cl, Br, I, CF3, NO2, CN, CO2H, CO2(alkyl), CONH2, CONH(alkyl), CON(alkyl)2, alkyl, alkenyl, alkynyl, O-alkyl, SO2NH2, SO2NH(alkyl) SO2N(alkyl)2, S-(alkyl), SO(alkyl), (un)substituted S(CH2)nPh, SO(CH2)nPh, SO2(alkyl), SO2(CH2)nPh, NH2, NH(alkyl), N(alkyl)2, NH(acyl), (un)substituted Ph, O(CH2)nPh; n = 0-6; L = II; Rx, Ry, Rz = H, F, Cl, Br, I, CF3, NO2, CN, CO2H, CO2(alkyl), CONH2, O-alkyl], and their physiol. acceptable salts, for their use as hypolipidemic agents. Thus, 1,2-diphenylazetidinone derivative III·trifluoroacetate was prepared from 4-(3-aminomethylphenyl)-1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]azetidinone via N-acylation with 11-{2-[3-hydroxy-3-phenyl-2-pyridin-2-yl-1-(pyridin-2-ylamino)propyl]-phenylcarbonyl}-undecanoic acid. Azetidinone III was tested for its cholesterol lowering ability [ED50 = 0.003 mg/mouse].

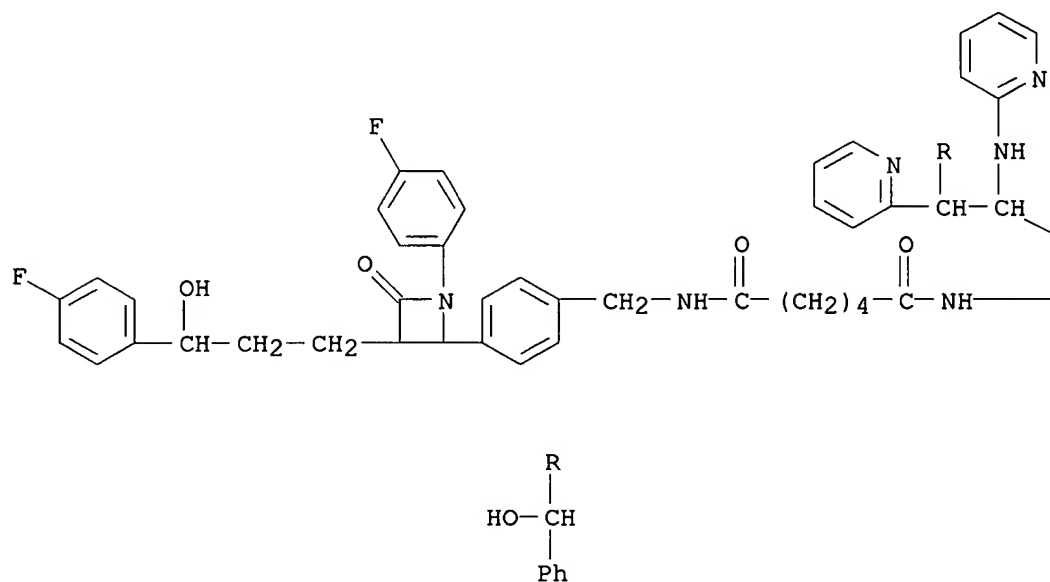
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 439090-91-2P 439090-95-6P 439090-97-8P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of diphenylazetidinone derivs. as hypolipidemics)

RN 439090-76-3 CAPLUS

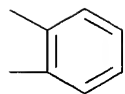
CN Hexanediamide, N-[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]methyl]-N'-[2-[3-hydroxy-3-phenyl-

2-(2-pyridinyl)-1-(2-pyridinylamino)propyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RN 439090-79-6 CAPLUS  
 CN Nonanediamide, N-[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]methyl]-N'-[2-[3-hydroxy-3-phenyl-2-(2-pyridinyl)-1-(2-pyridinylamino)propyl]phenyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

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CRN 439090-78-5  
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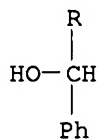
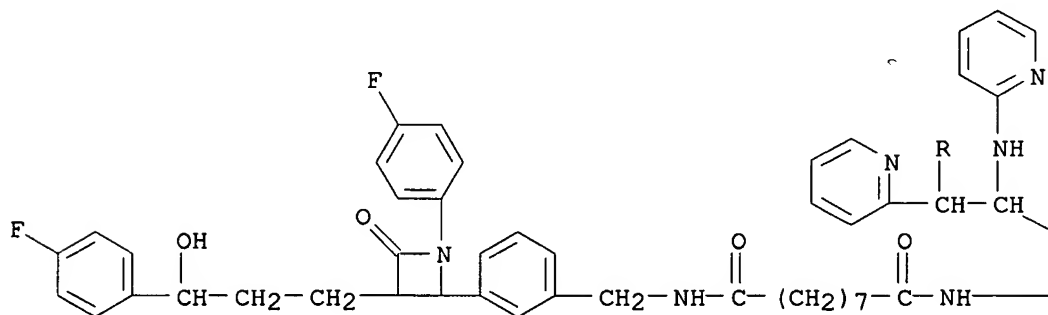
CN Nonanediamide, N-[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]-N'-[2-[3-hydroxy-3-phenyl-2-(2-pyridinyl)-1-(2-pyridinylamino)propyl]phenyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

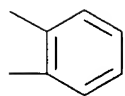
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CMF C59 H60 F2 N6 O5

PAGE 1-A



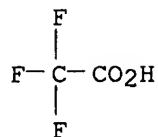
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CM 2

CRN 76-05-1

CMF C2 H F3 O2



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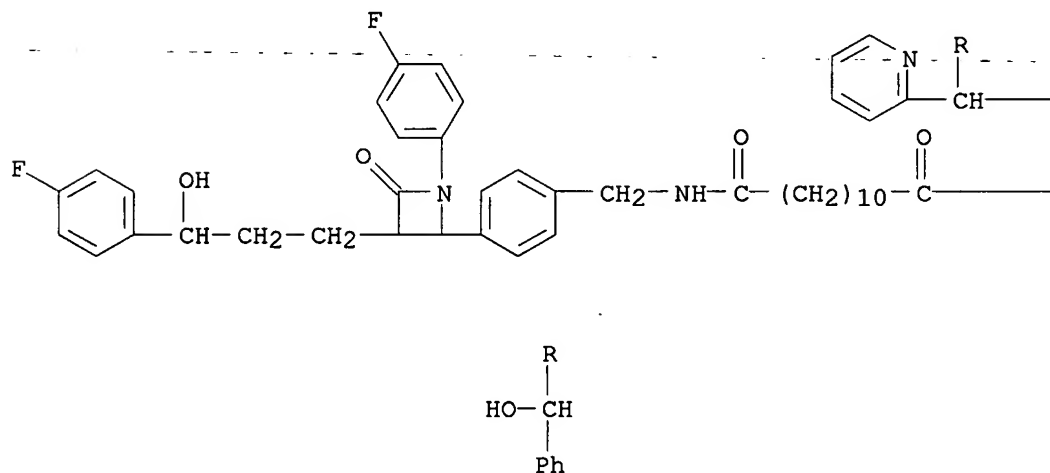
CN Dodecanediamide, N-[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]-N'-[2-[3-hydroxy-3-phenyl-2-(2-pyridinyl)-1-(2-pyridinylamino)propyl]phenyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

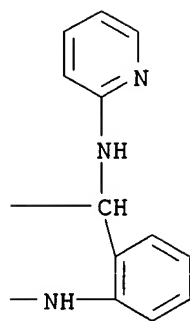
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CMF C62 H66 F2 N6 O5

PAGE 1-A



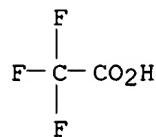




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CRN 76-05-1

CMF C2 H F3 O2



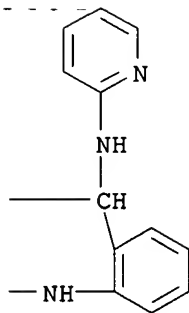
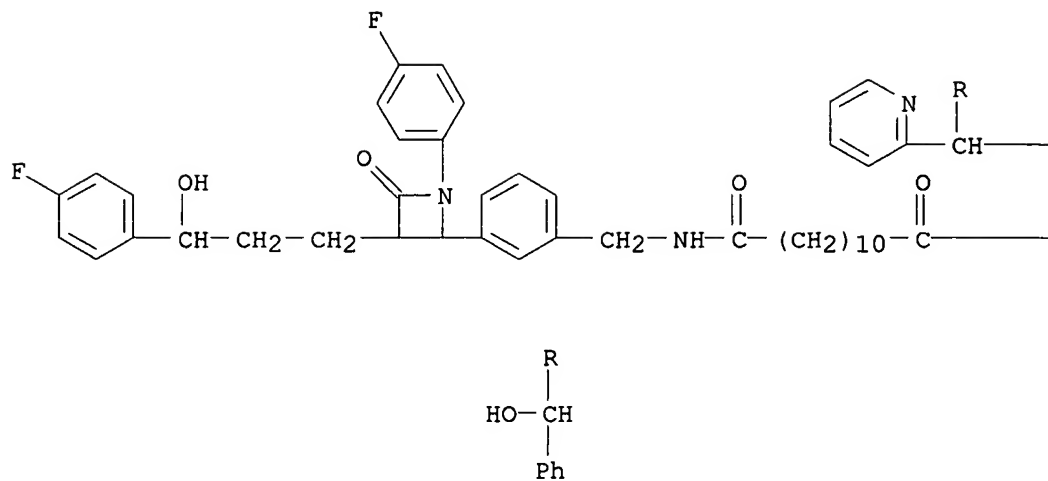
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CN Dodecanediamide, N-[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]-N'-[2-[3-hydroxy-3-phenyl-2-(2-pyridinyl)-1-(2-pyridinylamino)propyl]phenyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

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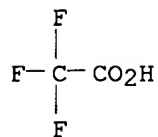
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CM 2

CRN 76-05-1

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RN 439090-89-8 CAPLUS

CN 5,8,11-Trioxa-2-azatridecan-13-amide, 1-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]-N-[2-[3-hydroxy-

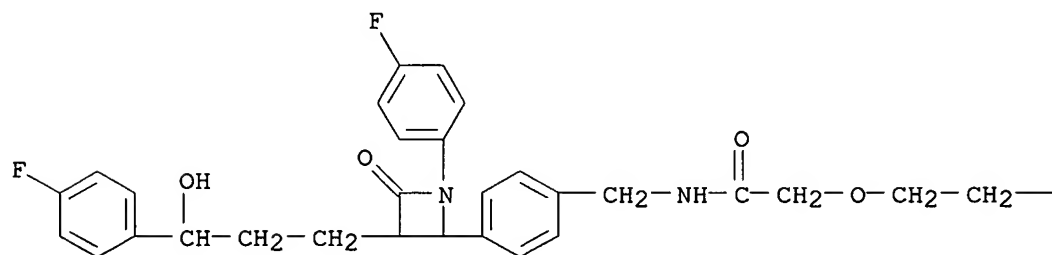
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mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

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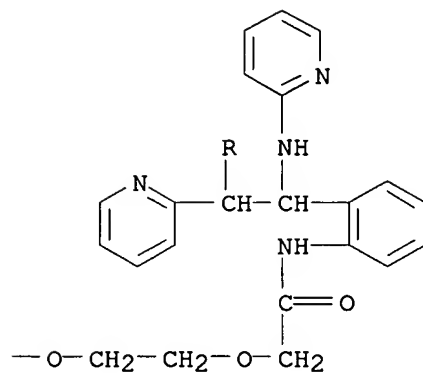
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CMF C58 H58 F2 N6 O8

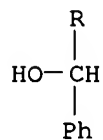
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PAGE 1-B



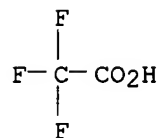
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CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439090-91-2 CAPLUS

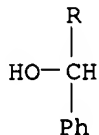
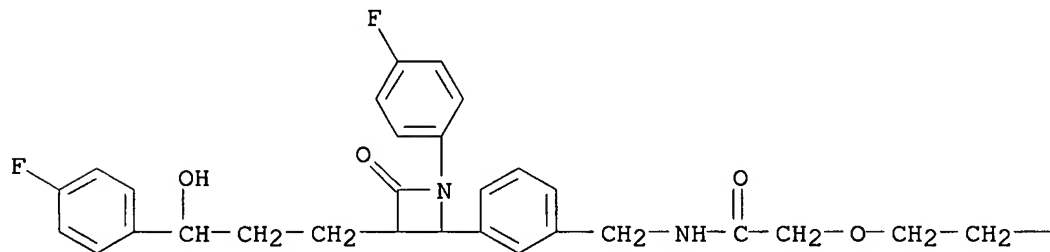
CN 5,8,11-Trioxa-2-azatridecan-13-amide, 1-[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]-N-[2-[3-hydroxy-3-phenyl-2-(2-pyridinyl)-1-(2-pyridinylamino)propyl]phenyl]-3-oxo-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

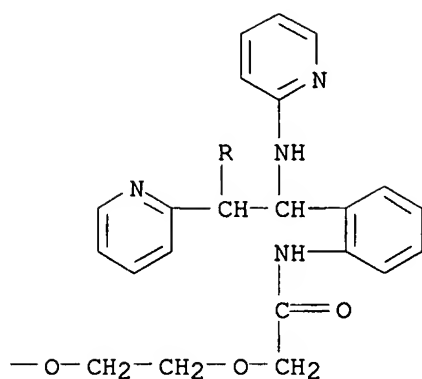
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CMF C58 H58 F2 N6 O8

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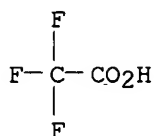




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CRN 76-05-1

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RN 439090-95-6 CAPLUS

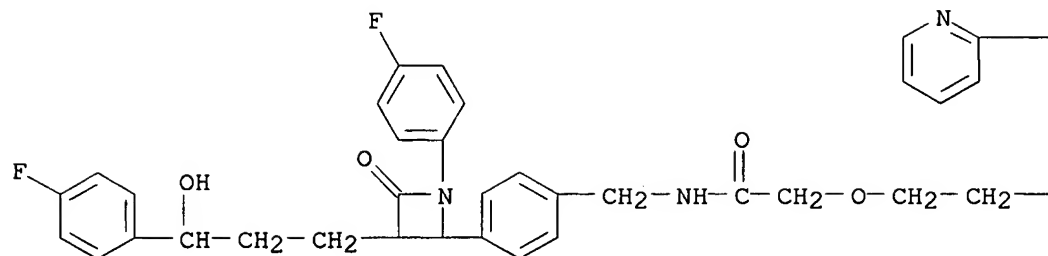
CN Acetamide, 2-[2-[2-[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-2-oxoethoxy]ethoxy]-N-[2-[3-hydroxy-3-phenyl-2-(2-pyridinyl)-1-(2-pyridinylamino)propyl]phenyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

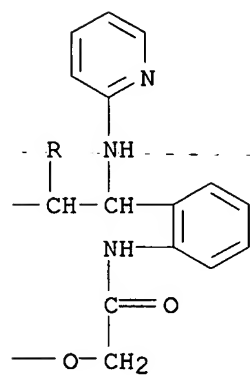
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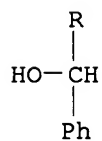
PAGE 1-A



PAGE 1-B



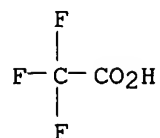
PAGE 2-A



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 439090-97-8 CAPLUS

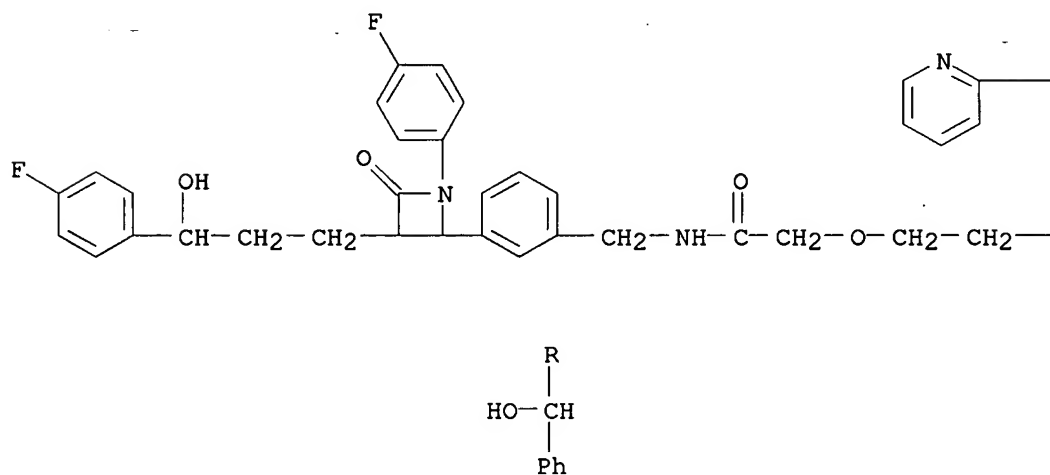
CN Acetamide, 2-[2-[2-[[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-2-oxoethoxy]ethoxy]-N-[2-[3-hydroxy-3-phenyl-2-(2-pyridinyl)-1-(2-pyridinylamino)propyl]phenyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

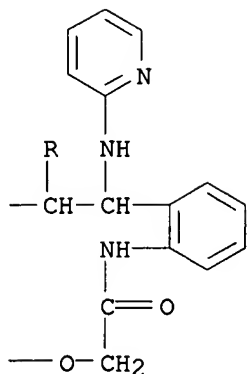
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PAGE 1-A

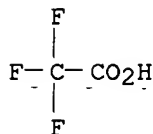




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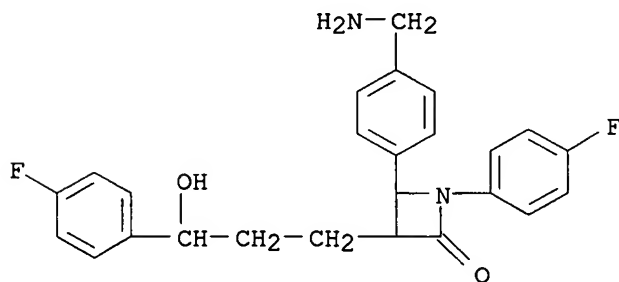
IT **439080-21-4**

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of diphenylazetidinone derivs. as hypolipidemics)

RN 439080-21-4 CAPLUS

CN 2-Azetidinone, 4-[4-(aminomethyl)phenyl]-1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:487523 CAPLUS

DOCUMENT NUMBER: 137:63113

30/05/2003&lt;L&gt; 02:53



TITLE: Method for producing novel 1,2-diphenylazetidinones, medicaments containing them, and their use for treating disorders of lipid metabolism

INVENTOR(S): Glombik, Heiner; Kramer, Werner; Flohr, Stefanie; Frick, Wendelin; Heuer, Hubert; Jaehne, Gerhard; Lindenschmidt, Andreas; Schaefer, Hans-Ludwig

PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany

SOURCE: PCT Int. Appl., 77 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050027	A1	20020627	WO 2001-EP14531	20011211
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
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DE 10152981	A1	20030508	DE 2001-10152981	20011026
AU 2002016097	A5	20020701	AU 2002-16097	20011211
US 2002137689	A1	20020926	US 2001-21502	20011219
PRIORITY APPLN. INFO.:			DE 2000-10064398 A	20001221
			DE 2001-10152981 A	20011026
			WO 2001-EP14531 W	20011211
OTHER SOURCE(S):		CASREACT 137:63113; MARPAT 137:63113		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to the compds. I [R1, R2, R3, R4, R5, R6 = C0-30-alkylene-LAG {optionally containing O, CO, CH:CH, C.tplbond.C, N(C1-6-alkyl), N(C1-6-alkylphenyl), NH}, H, F, Cl, Br, I, CF3, NO2, CN, CO2H, CO2(C1-6-alkyl), CONH, CONH(C1-6-alkyl), CON(C1-6-alkyl)2, C1-6-alkyl, C1-6-alkenyl, C1-6-alkynyl, O-(C1-6-alkyl), SO2NH2, SO2NH(C1-6-alkyl) SO2N(C1-6-alkyl)2, S-(C1-6-alkyl), SO(C1-6-alkyl), (un)substituted S(CH2)nPh, SO(CH2)nPh, SO2(C1-6-alkyl), SO2(CH2)nPh, NH2, NH(C1-6-alkyl), N(C1-6-alkyl)2, NH(C1-6-acyl), (un)substituted Ph, O(CH2)nPh; LAG = sugar residue, di-, tri-, tetrasaccharide, carbohydrate acid, amino sugar, amino acid, oligopeptide (2 - 9 residues), (trialkylammonium)alkyl, OSO3H] and to their physiol. acceptable salts, suitable, for example, as hypolipidemics. Thus, 1,2-diphenylazetidinone II [R10 = CO(CH2)11NHCO(CHOH)4CH2OH] was prepared from (methoxyphenyl)azetidinone II (R10 = H) via N-acylation with 12-[(2,3,4,5,6-pentahydroxyhexanoyl)amino]dodecanoic acid. Azetidinone II was tested for its cholesterol lowering ability [ED50 = 0.003 mg/mouse].

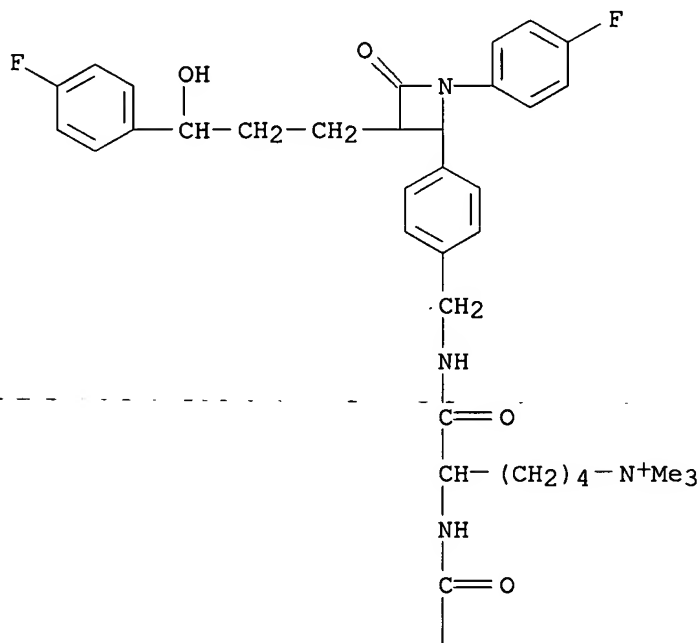
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RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of novel 1,2-diphenylazetidinones as hypolipidemics)

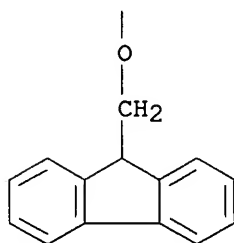
RN 439080-65-6 CAPLUS

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(CA INDEX NAME)

PAGE 1-A



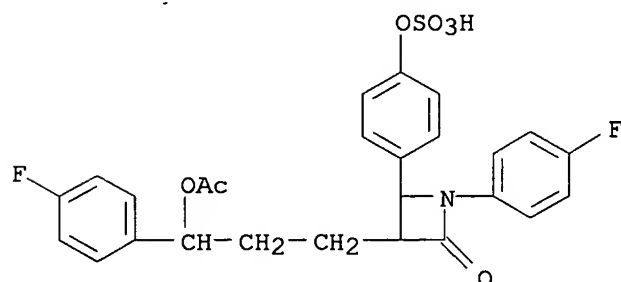
PAGE 2-A



● Cl<sup>-</sup>

RN 439080-91-8 CAPLUS

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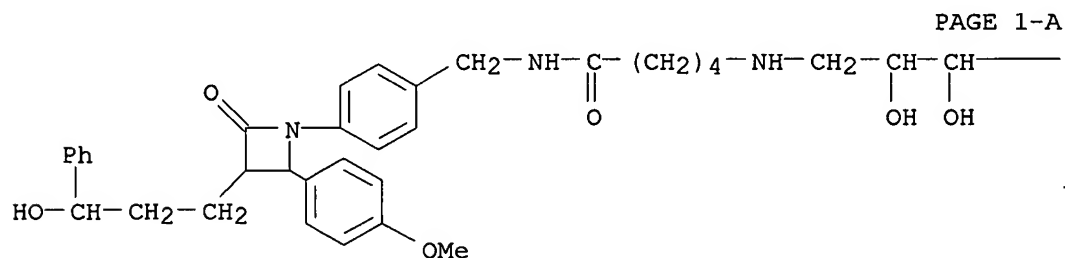
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 439080-34-9P 439080-35-0P 439080-37-2P  
 439080-38-3P 439080-45-2P 439080-46-3P  
 439080-47-4P 439080-48-5P 439080-50-9P  
 439080-52-1P 439080-54-3P 439080-56-5P  
 439080-63-4P 439080-64-5P 439080-66-7P  
 439080-72-5P 439080-74-7P 439080-76-9P  
 439080-78-1P 439080-80-5P 439080-82-7P  
 439080-84-9P 439080-86-1P 439080-89-4P  
 439080-90-7P 439080-92-9P 439080-93-0P  
 439080-94-1P 439080-95-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel 1,2-diphenylazetidinones as hypolipidemics)

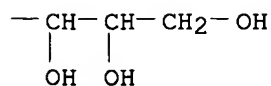
RN 439080-17-8 CAPLUS

CN Hexitol, 1-deoxy-1-[[5-[[[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]phenyl]methyl]amino]-5-oxopentyl]amino]- (9CI) (CA INDEX NAME)



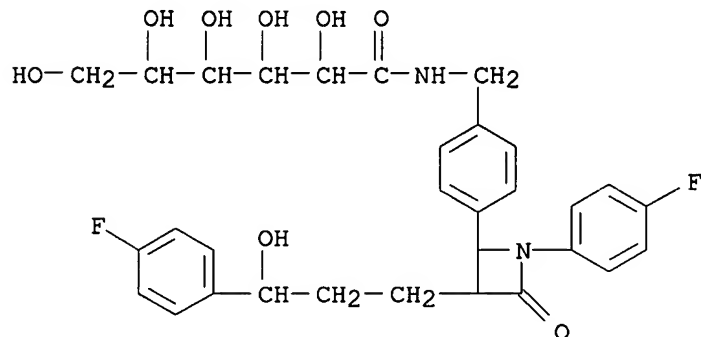
PAGE 1-A

PAGE 1-B



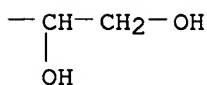
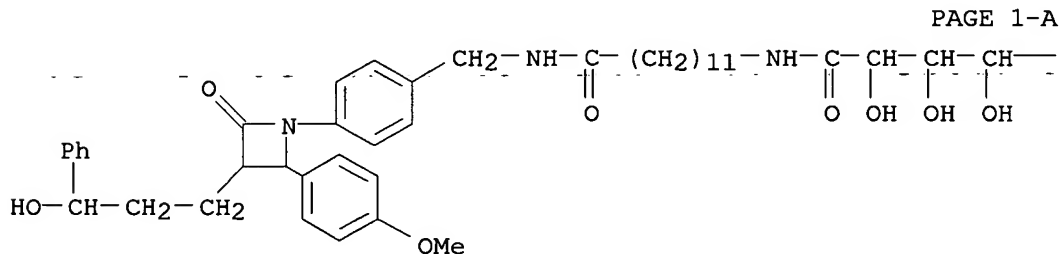
RN 439080-18-9 CAPLUS

CN Hexonamide, N-[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 439080-22-5 CAPLUS

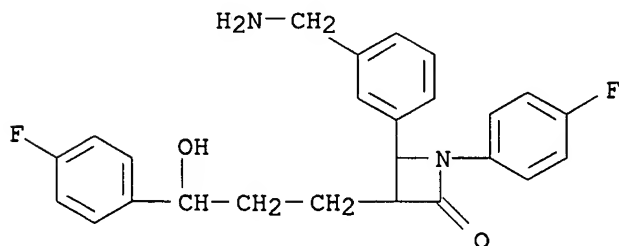
CN Hexonamide, N-[12-[[[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]phenyl]methyl]amino]-12-oxododecyl]- (9CI) (CA INDEX NAME)



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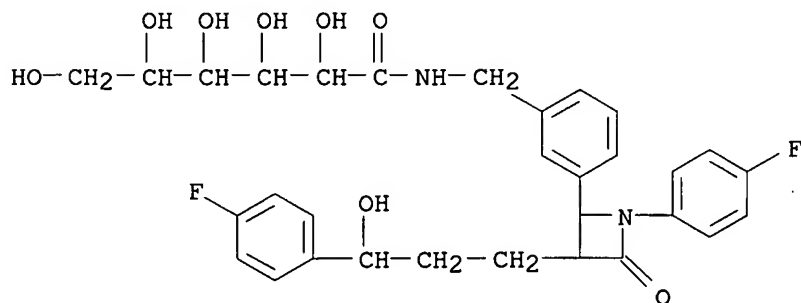
RN 439080-29-2 CAPLUS

CN 2-Azetidinone, 4-[3-(aminomethyl)phenyl]-1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]- (9CI) (CA INDEX NAME)



RN 439080-30-5 CAPLUS

CN Hexonamide, N-[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]- (9CI) (CA INDEX NAME)



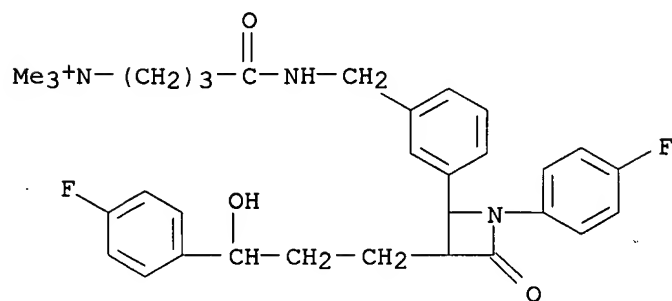
RN 439080-32-7 CAPLUS

CN 1-Butanaminium, 4-[[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-N,N,N-trimethyl-4-oxo-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 439080-31-6

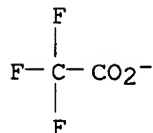
CMF C32 H38 F2 N3 O3



CM 2

CRN 14477-72-6

CMF C2 F3 O2



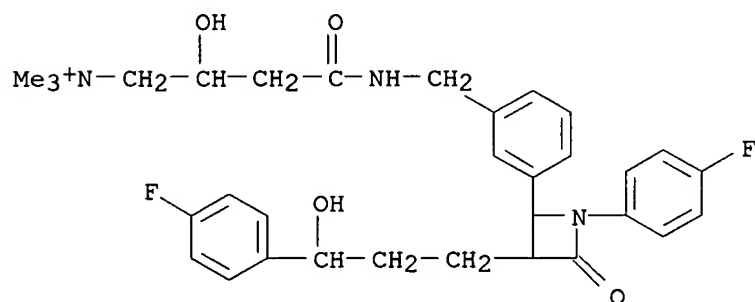
RN 439080-34-9 CAPLUS

CN 1-Butanaminium, 4-[[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-2-hydroxy-N,N,N-trimethyl-4-oxo-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 439080-33-8

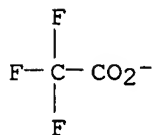
CMF C32 H38 F2 N3 O4



CM 2

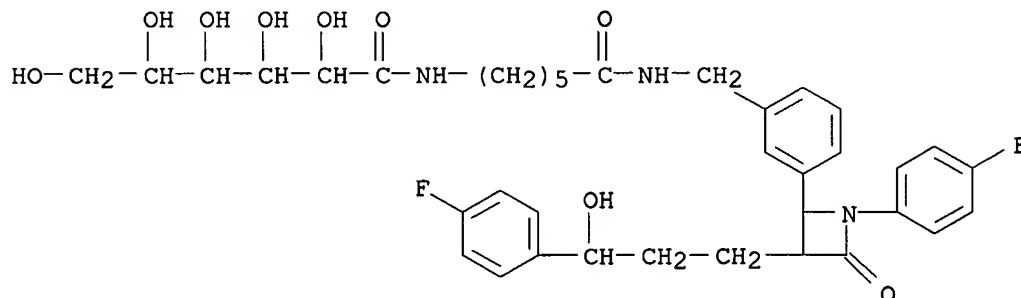
CRN 14477-72-6

CMF C2 F3 O2



RN 439080-35-0 CAPLUS

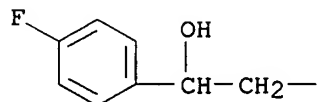
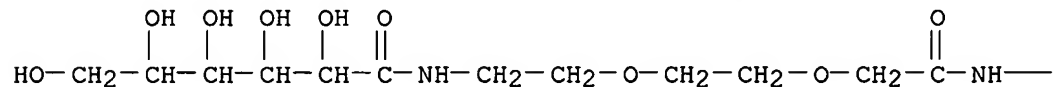
CN Hexonamide, N-[6-[[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-6-oxohexyl]- (9CI) (CA INDEX NAME)



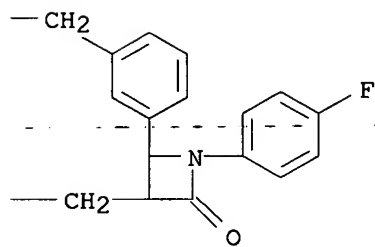
RN 439080-37-2 CAPLUS

CN Hexonamide, N-[2-[2-[2-[[[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-2-oxoethoxy]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

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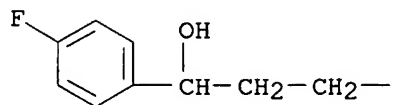
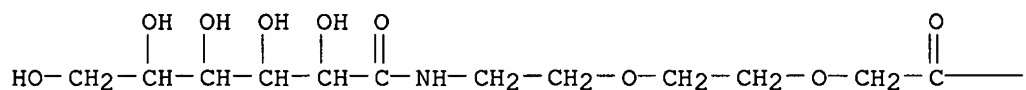
PAGE 1-B



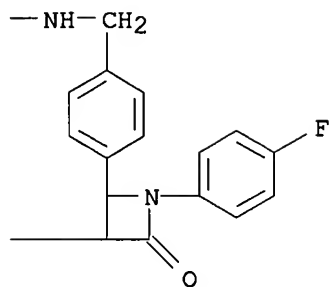
RN 439080-38-3 CAPLUS

CN Hexonamide, N-[2-[2-[2-[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-2-oxoethoxy]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

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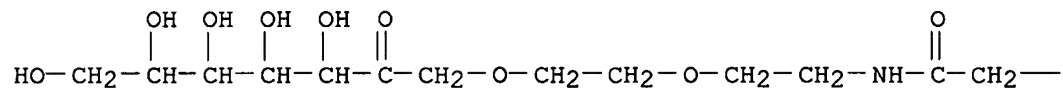
PAGE 1-B



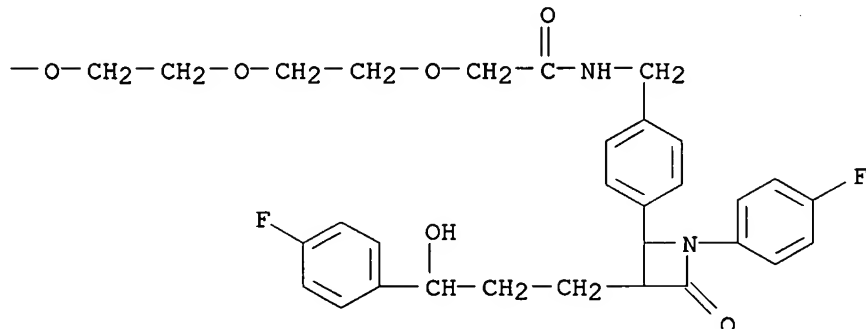
RN 439080-45-2 CAPLUS

CN 2-Heptulose, 1-O-[19-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]-7,17-dioxo-3,9,12,15-tetraoxa-6,18-diazanonadec-1-yl]- (9CI) (CA INDEX NAME)

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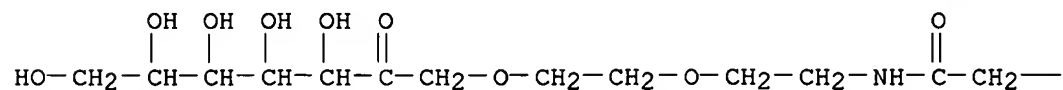
PAGE 1-B



RN 439080-46-3 CAPLUS

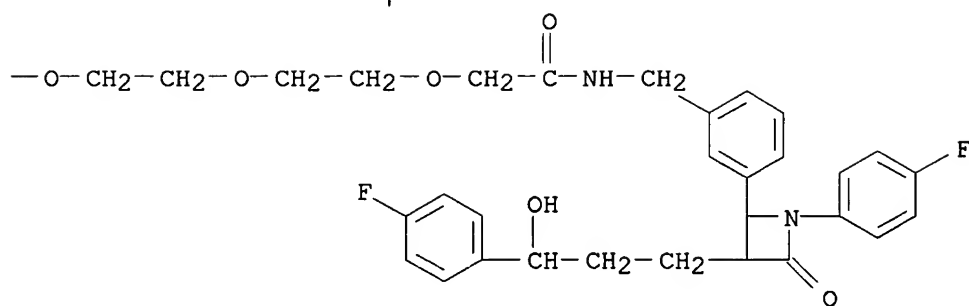
CN 2-Heptulose, 1-O-[19-[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]-7,17-dioxo-3,9,12,15-tetraoxa-6,18-diazanonadec-1-yl]- (9CI) (CA INDEX NAME)

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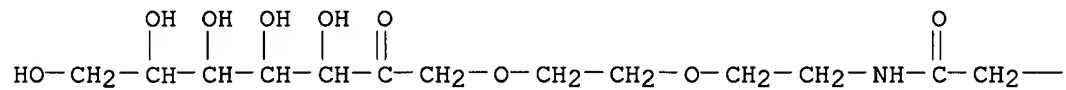
PAGE 1-B



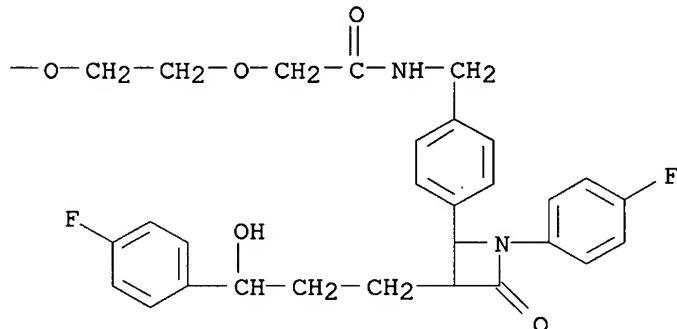
RN 439080-47-4 CAPLUS

CN 2-Heptulose, 1-O-[16-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]-7,14-dioxo-3,9,12-trioxa-6,15-diaza-hexadec-1-yl]- (9CI) (CA INDEX NAME)

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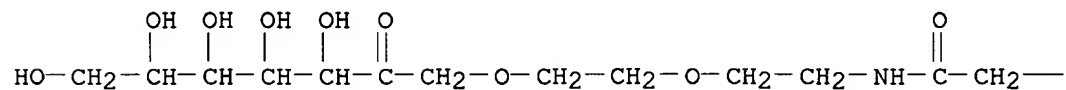
PAGE 1-B

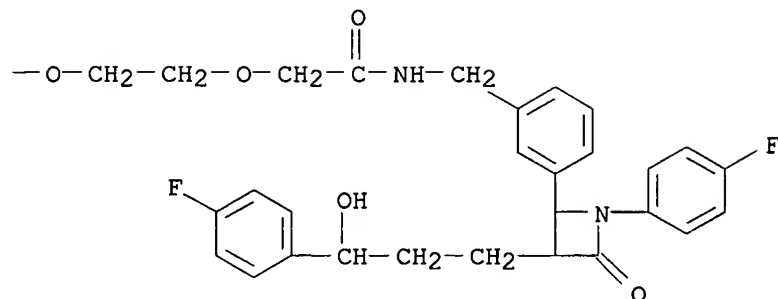


RN 439080-48-5 CAPLUS

CN 2-Heptulose, 1-O-[16-[3-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]-7,14-dioxo-3,9,12-trioxa-6,15-diaza-hexadec-1-yl]- (9CI) (CA INDEX NAME)

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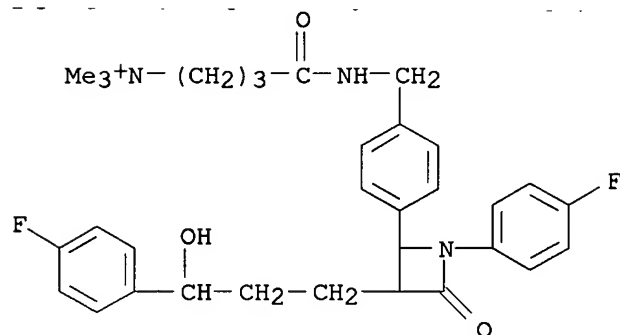
RN 439080-50-9 CAPLUS

CN 1-Butanaminium, 4-[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-N,N,N-trimethyl-4-oxo-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 439080-49-6

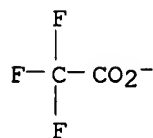
CMF C32 H38 F2 N3 O3



CM 2

CRN 14477-72-6

CMF C2 F3 O2



RN 439080-52-1 CAPLUS

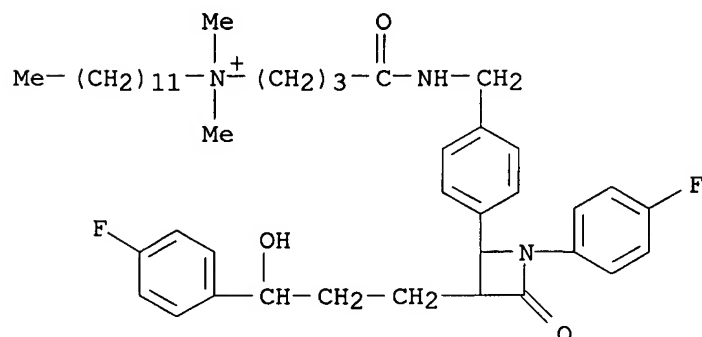
CN 1-Dodecanaminium, N-[4-[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-N,N,N-trimethyl-4-oxo-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

hydroxypropyl]-4-oxo-2-azetidinyllphenyl]methyl]amino]-4-oxobutyl]-N,N-dimethyl-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 439080-51-0

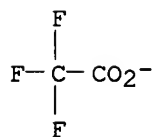
CMF C43 H60 F2 N3 O3



CM 2

CRN 14477-72-6

CMF -C2-F3 O2



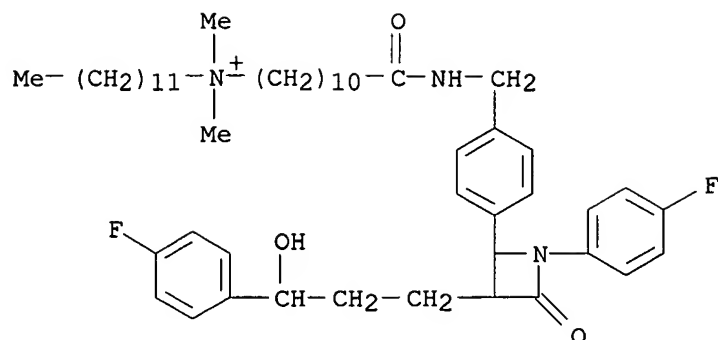
RN 439080-54-3 CAPLUS

CN 1-Dodecanaminium, N-[11-[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyllphenyl]methyl]amino]-11-oxoundecyl]-N,N-dimethyl-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 439080-53-2

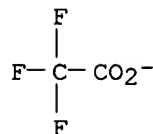
CMF C50 H74 F2 N3 O3



CM 2

CRN 14477-72-6

CMF C2 F3 O2



RN 439080-56-5 CAPLUS

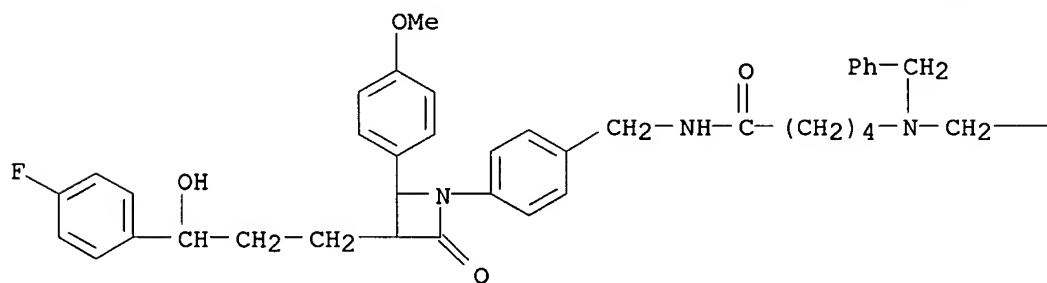
CN Hexitol, 1-deoxy-1-[[[5-[[[4-[3-[3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]phenyl]methyl]amino]-5-oxopentyl](phenylmethyl)amino]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 439080-55-4

CMF C44 H54 F N3 O9

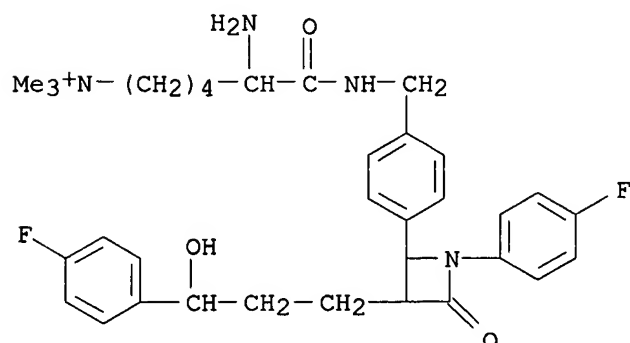
PAGE 1-A





RN 439080-66-7 CAPLUS

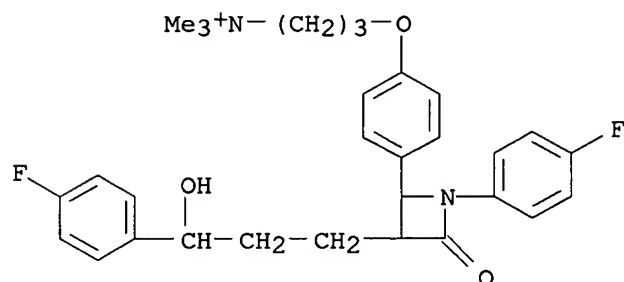
CN 1-Hexanaminium, 5-amino-6-[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]methyl]amino]-N,N,N-trimethyl-6-oxo-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 439080-72-5 CAPLUS

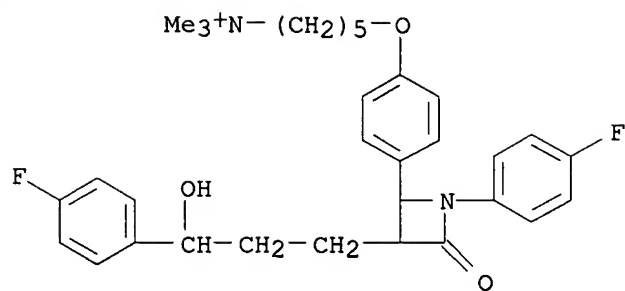
CN 1-Propanaminium, 3-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenoxy]-N,N,N-trimethyl-, bromide (9CI) (CA INDEX NAME)



● Br<sup>-</sup>

RN 439080-74-7 CAPLUS

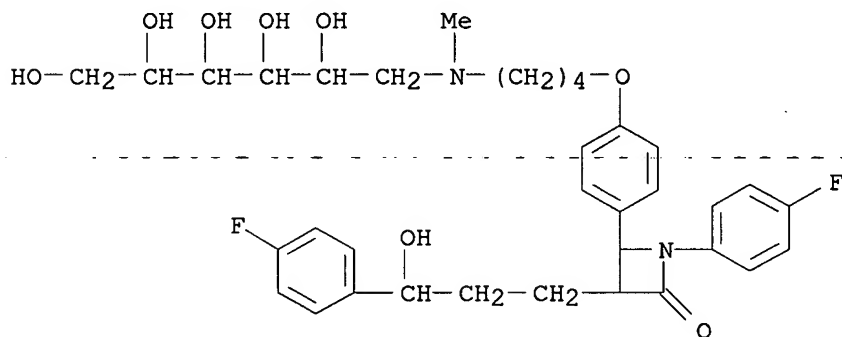
CN 1-Pentanaminium, 5-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenoxy]-N,N,N-trimethyl-, bromide (9CI) (CA INDEX NAME)



● Br<sup>-</sup>

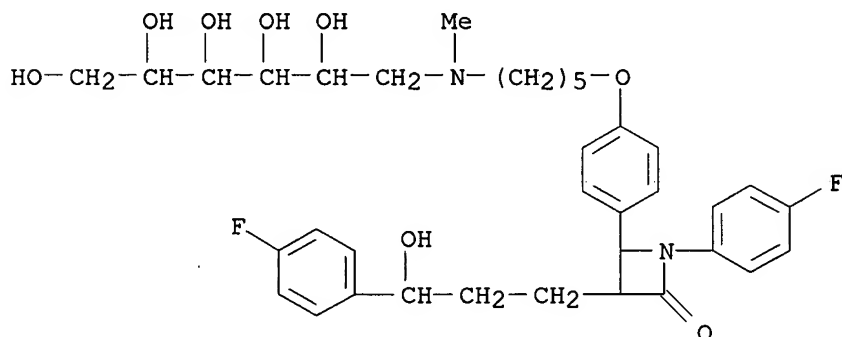
RN 439080-76-9 CAPLUS

CN Hexitol, 1-deoxy-1-[[4-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenoxy]butyl]methylamino]- (9CI) (CA INDEX NAME)



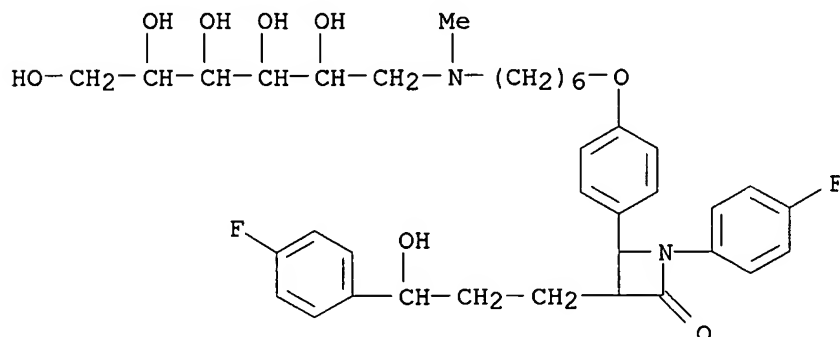
RN 439080-78-1 CAPLUS

CN Hexitol, 1-deoxy-1-[[5-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenoxy]pentyl]methylamino]- (9CI) (CA INDEX NAME)



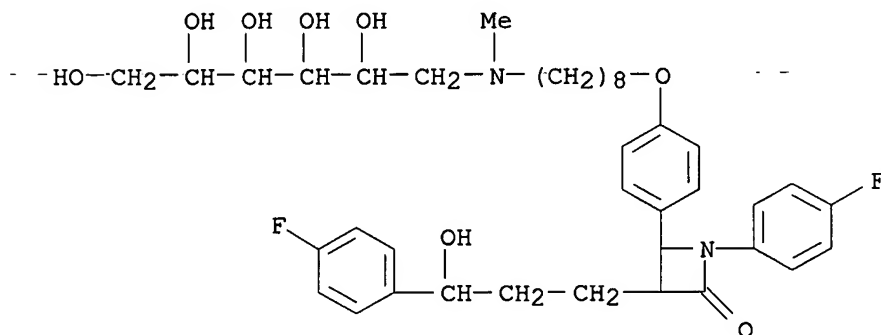
RN 439080-80-5 CAPLUS

CN Hexitol, 1-deoxy-1-[[6-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenoxy]hexyl]methylamino]- (9CI) (CA INDEX NAME)



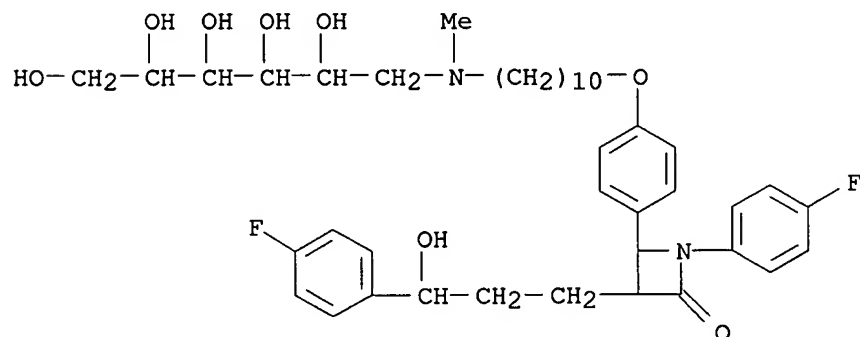
RN 439080-82-7 CAPLUS

CN Hexitol, 1-deoxy-1-[[8-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenoxy]octyl]methylamino]- (9CI) (CA INDEX NAME)



RN 439080-84-9 CAPLUS

CN Hexitol, 1-deoxy-1-[[10-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenoxy]decyl]methylamino]- (9CI) (CA INDEX NAME)

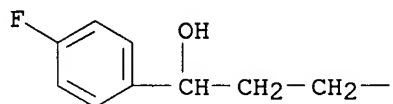
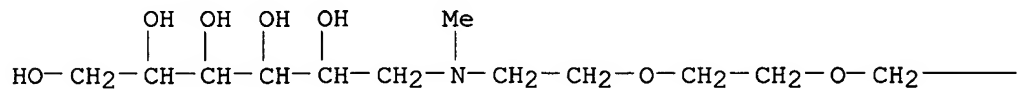




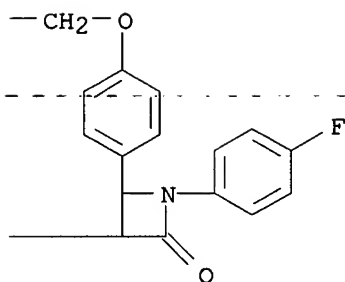
RN 439080-86-1 CAPLUS

CN Hexitol, 1-deoxy-1-[[2-[2-[2-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenoxy]ethoxy]ethoxy]ethyl]methylamin  
o]- (9CI) (CA INDEX NAME)

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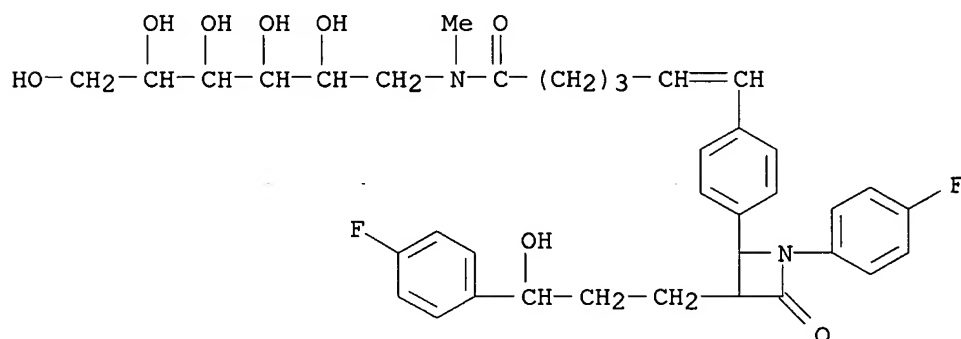


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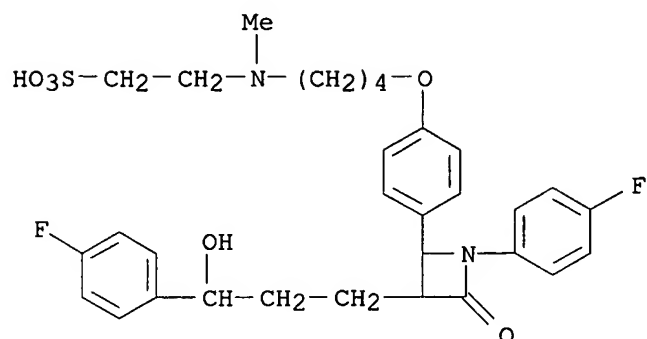
RN 439080-89-4 CAPLUS

CN Hexitol, 1-deoxy-1-[[6-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl]-1-oxo-5-hexenyl]methylamino]-  
(9CI) (CA INDEX NAME)



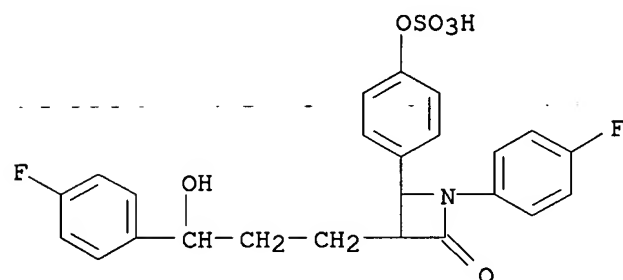
RN 439080-90-7 CAPLUS

CN Ethanesulfonic acid, 2-[[4-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenoxy]butyl]methylamino]- (9CI) (CA INDEX NAME)



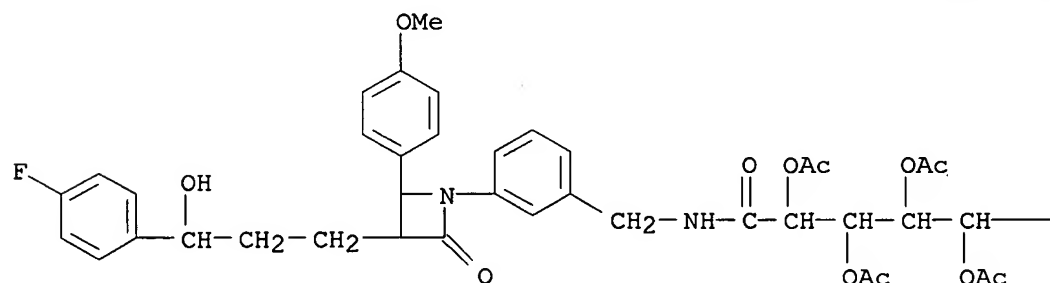
RN 439080-92-9 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-[4-(sulfooxy)phenyl]- (9CI) (CA INDEX NAME)



RN 439080-93-0 CAPLUS

CN Hexonamide, N-[[3-[3-[3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]phenyl]methyl]-, 2,3,4,5,6-pentaacetate (9CI) (CA INDEX NAME)



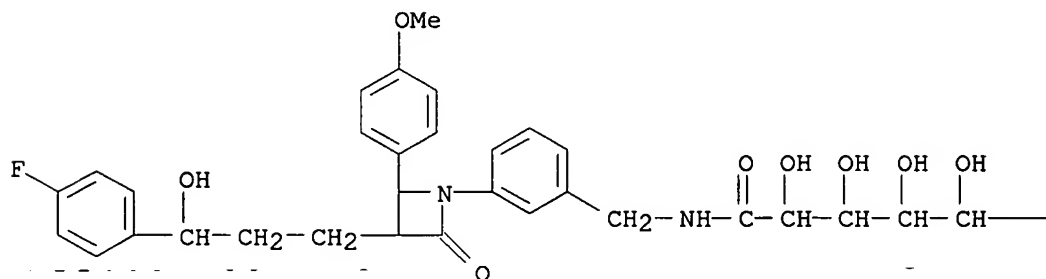
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—CH<sub>2</sub>—OAc

RN 439080-94-1 CAPLUS  
 CN Hexonamide, N-[[3-[3-[3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]phenyl]methyl]- (9CI) (CA INDEX NAME)

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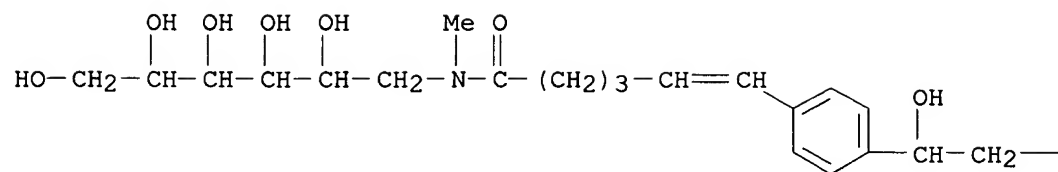


PAGE 1-B

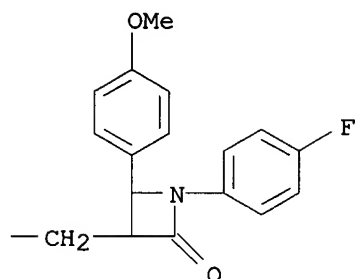
—CH<sub>2</sub>—OH

RN 439080-95-2 CAPLUS  
 CN Hexitol, 1-deoxy-1-[[6-[4-[3-[1-(4-fluorophenyl)-2-(4-methoxyphenyl)-4-oxo-3-azetidiny]-1-hydroxypropyl]phenyl]-1-oxo-5-hexenyl]methylamino]- (9CI) (CA INDEX NAME)

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IT 402820-38-6 439081-02-4 439081-03-5

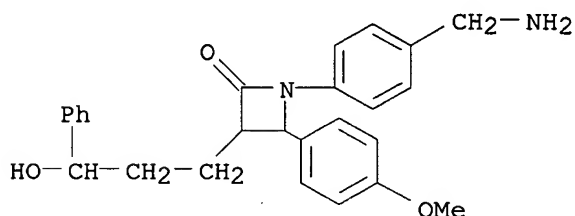
439081-04-6 439081-06-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of novel 1,2-diphenylazetidinones as hypolipidemics)

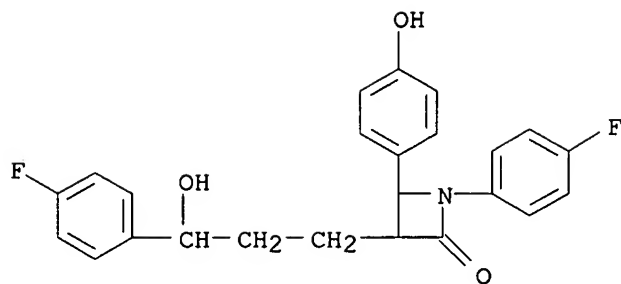
RN 402820-38-6 CAPLUS

CN 2-Azetidinone, 1-[4-(aminomethyl)phenyl]-3-(3-hydroxy-3-phenylpropyl)-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



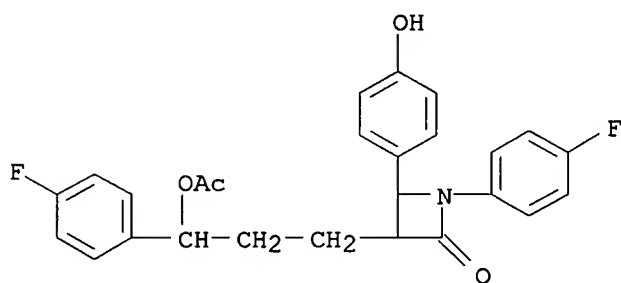
RN 439081-02-4 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



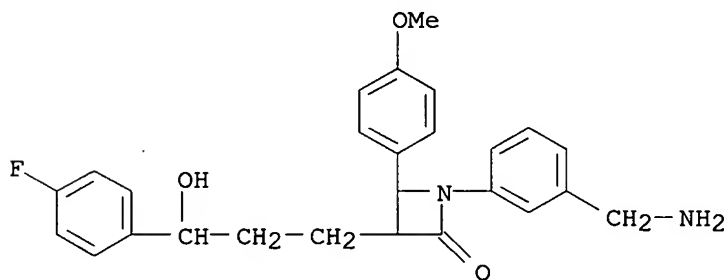
RN 439081-03-5 CAPLUS

CN 2-Azetidinone, 3-[3-(acetyloxy)-3-(4-fluorophenyl)propyl]-1-(4-fluorophenyl)-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



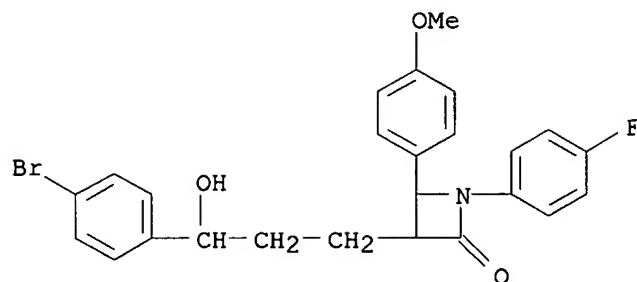
RN 439081-04-6 CAPLUS

CN 2-Azetidinone, 1-[3-(aminomethyl)phenyl]-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 439081-06-8 CAPLUS

CN 2-Azetidinone, 3-[3-(4-bromophenyl)-3-hydroxypropyl]-1-(4-fluorophenyl)-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



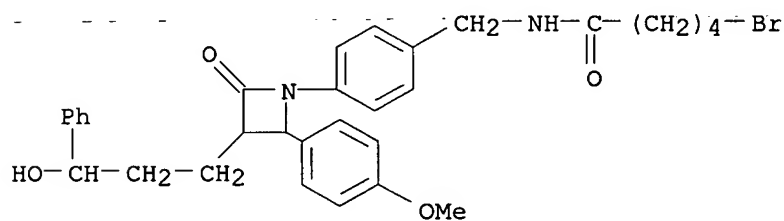
IT 439080-16-7P 439080-20-3P 439080-21-4P  
 439080-27-0P 439080-28-1P 439080-60-1P  
 439080-61-2P 439080-62-3P 439080-68-9P  
 439080-70-3P 439080-71-4P 439080-73-6P  
 439080-75-8P 439080-77-0P 439080-79-2P  
 439080-81-6P 439080-83-8P 439080-85-0P  
 439080-88-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of novel 1,2-diphenylazetidinones as hypolipidemics)

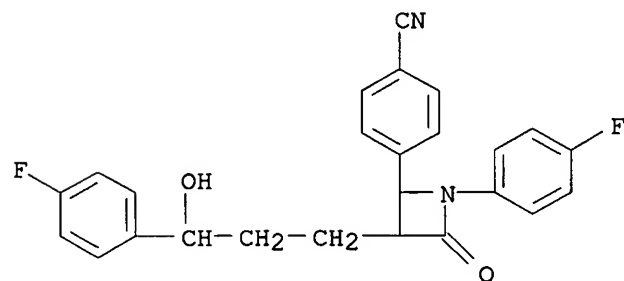
RN 439080-16-7 CAPLUS

CN Pentanamide, 5-bromo-N-[[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



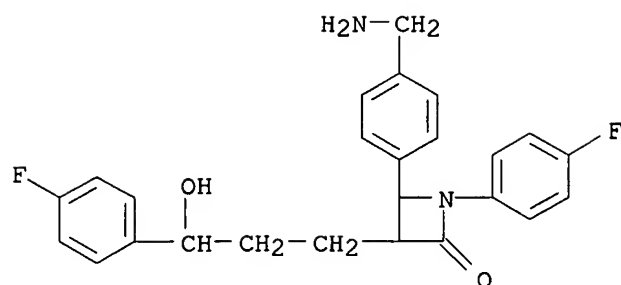
RN 439080-20-3 CAPLUS

CN Benzonitrile, 4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]- (9CI) (CA INDEX NAME)



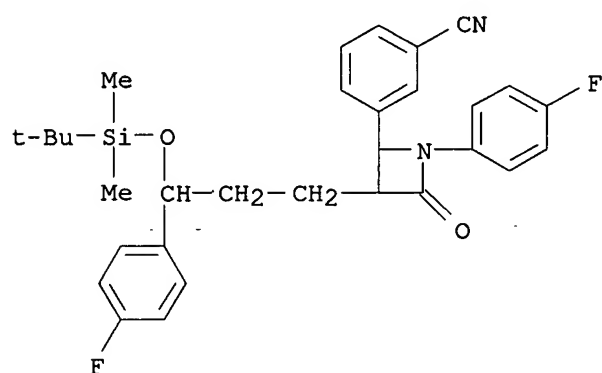
RN 439080-21-4 CAPLUS

CN 2-Azetidinone, 4-[4-(aminomethyl)phenyl]-1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]- (9CI) (CA INDEX NAME)



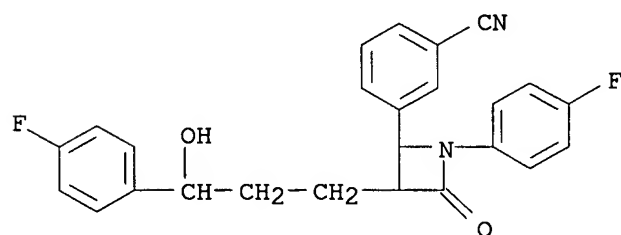
RN 439080-27-0 CAPLUS

CN Benzonitrile, 3-[3-[3-[(1,1-dimethylethyl)dimethylsilyl]oxy]-3-(4-fluorophenyl)propyl]-1-(4-fluorophenyl)-4-oxo-2-azetidinyl]- (9CI) (CA INDEX NAME)



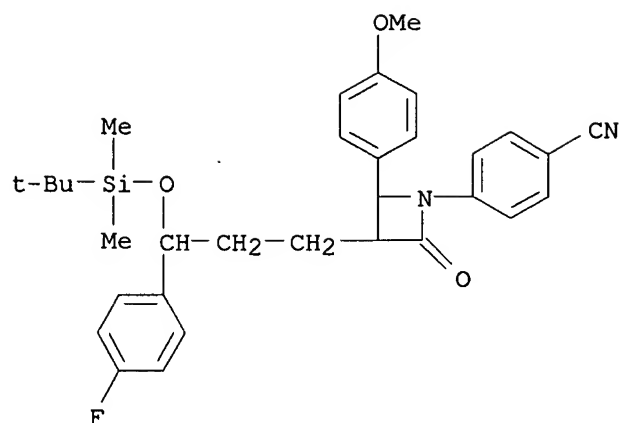
RN 439080-28-1 CAPLUS

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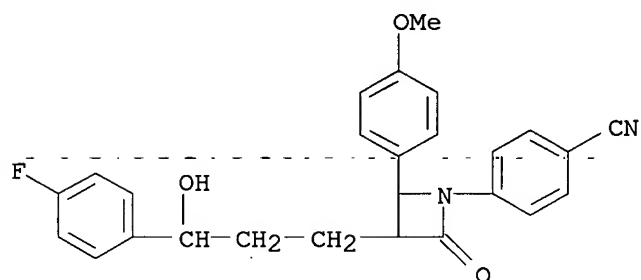
RN 439080-60-1 CAPLUS

CN Benzonitrile, 4-[3-[3-[(1,1-dimethylethyl)dimethylsilyl]oxy]-3-(4-fluorophenyl)propyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]- (9CI) (CA INDEX NAME)



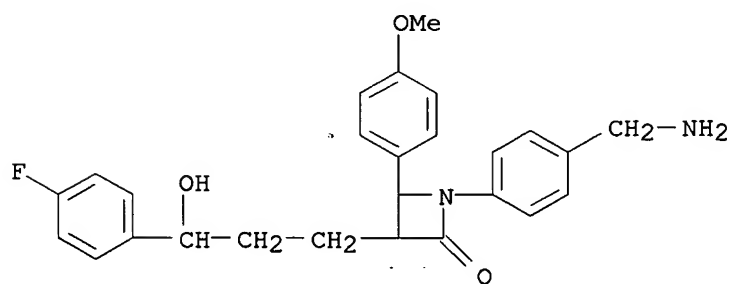
RN 439080-61-2 CAPLUS

CN Benzonitrile, 4-[3-[3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]- (9CI) (CA INDEX NAME)



RN 439080-62-3 CAPLUS

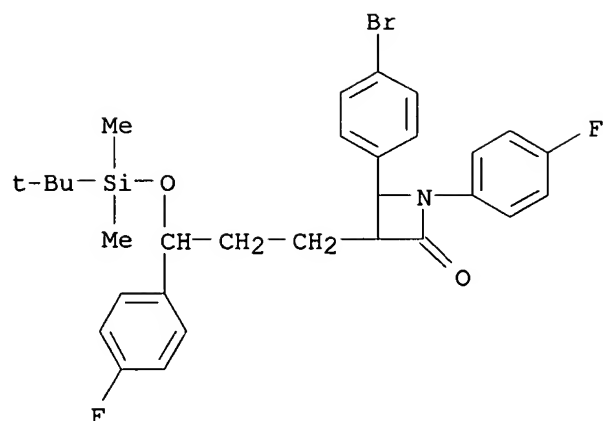
CN 2-Azetidinone, 1-[4-(aminomethyl)phenyl]-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



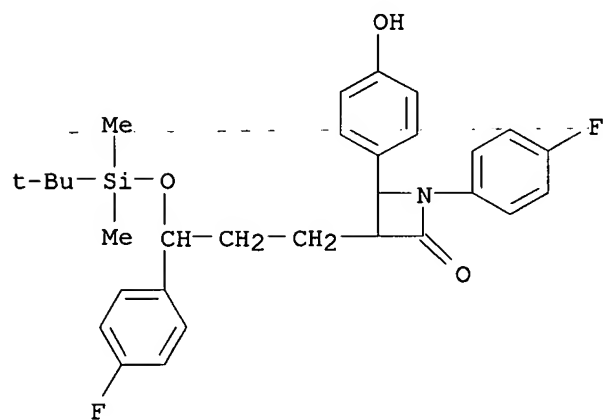
RN 439080-68-9 CAPLUS

CN 2-Azetidinone, 4-(4-bromophenyl)-3-[3-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3-(4-fluorophenyl)propyl]-1-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

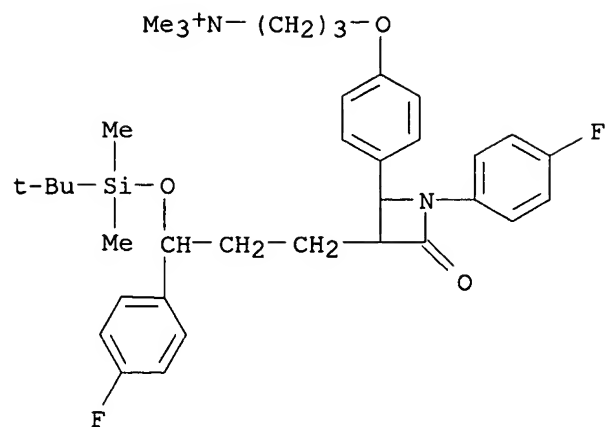




RN 439080-70-3 CAPLUS  
 CN 2-Azetidinone, 3-[3-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3-(4-fluorophenyl)propyl]-1-(4-fluorophenyl)-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

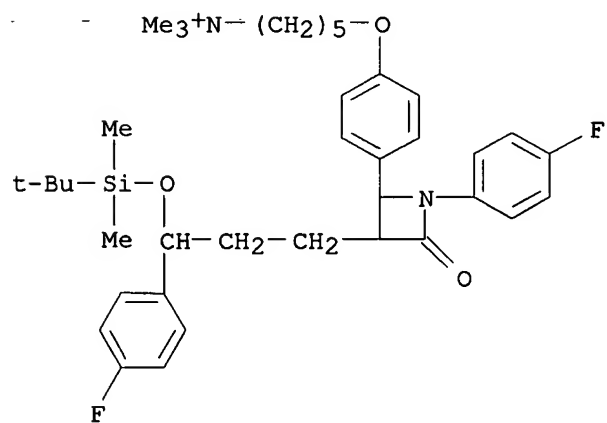


RN 439080-71-4 CAPLUS  
 CN 1-Propanaminium, 3-[4-[3-[3-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3-(4-fluorophenyl)propyl]-1-(4-fluorophenyl)-4-oxo-2-azetidinyl]phenoxy]-N,N,N-trimethyl-, bromide (9CI) (CA INDEX NAME)



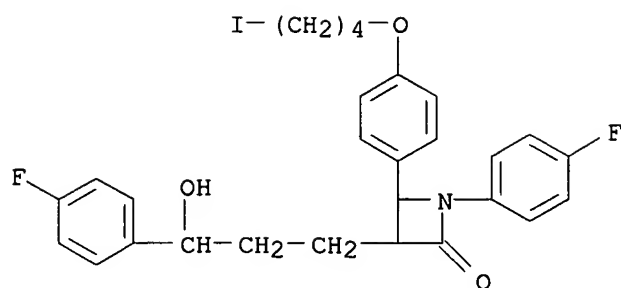
● Br<sup>-</sup>

RN 439080-73-6 CAPLUS  
 CN 1-Pentanaminium, 5-[4-[3-[3-[(1,1-dimethylethyl)dimethylsilyl]oxy]-3-(4-fluorophenyl)propyl]-1-(4-fluorophenyl)-4-oxo-2-azetidiny]phenoxy]-N,N,N-trimethyl-, bromide (9CI) (CA INDEX NAME)



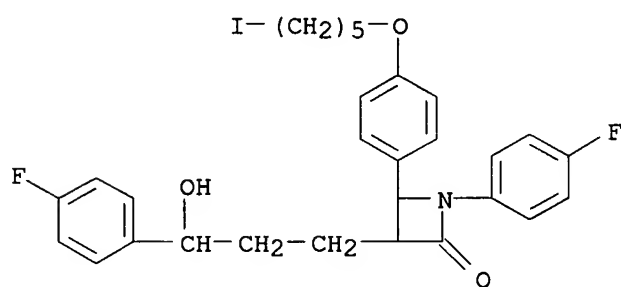
● Br<sup>-</sup>

RN 439080-75-8 CAPLUS  
 CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-[4-(4-iodobutoxy)phenyl]- (9CI) (CA INDEX NAME)



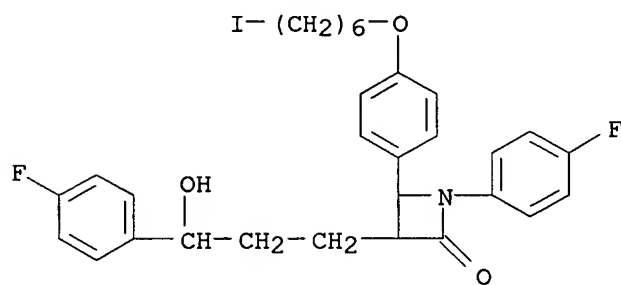
RN 439080-77-0 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-[4-[(5-iodopentyl)oxy]phenyl]- (9CI) (CA INDEX NAME)



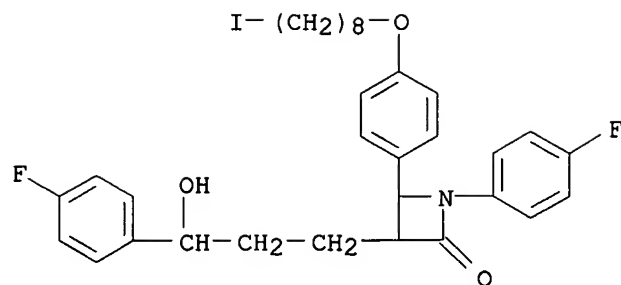
RN 439080-79-2 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-[4-[(6-iodohexyl)oxy]phenyl]- (9CI) (CA INDEX NAME)



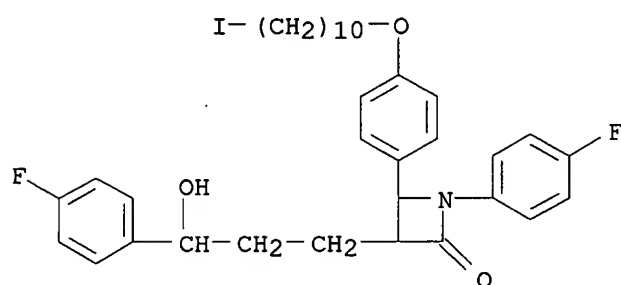
RN 439080-81-6 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-[4-[(8-iodooctyl)oxy]phenyl]- (9CI) (CA INDEX NAME)



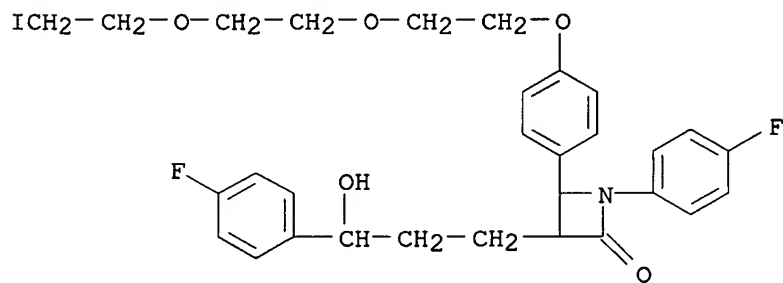
RN 439080-83-8 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-[4-[(10-iododecyl)oxy]phenyl]- (9CI) (CA INDEX NAME)



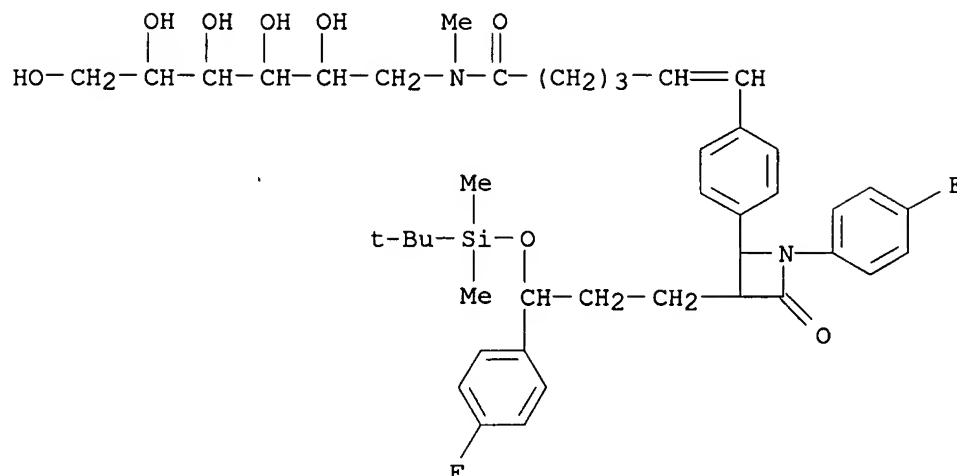
RN 439080-85-0 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-[4-[2-[2-(2-iodoethoxy)ethoxy]ethoxy]phenyl]- (9CI) (CA INDEX NAME)



RN 439080-88-3 CAPLUS

CN Hexitol, 1-deoxy-1-[[6-[4-[3-[3-[[1,1-dimethylethyl]dimethylsilyl]oxy]-3-(4-fluorophenyl)propyl]-1-(4-fluorophenyl)-4-oxo-2-azetidinyl]phenyl]-1-oxo-5-hexenyl]methylamino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:326280 CAPLUS

DOCUMENT NUMBER: 137:198660

TITLE: The identification of intestinal scavenger receptor class B, type I (SR-BI) by expression cloning and its role in cholesterol absorption

AUTHOR(S): Altmann, Scott W.; Davis, Harry R.; Yao, Xiaorui; Laverty, Maureen; Compton, Douglas S.; Zhu, Li-ji; Crona, James H.; Caplen, Mary Ann; Hoos, Lizbeth M.; Tetzloff, Glen; Priestley, Tony; Burnett, Duane A.; Strader, Catherine D.; Graziano, Michael P.

CORPORATE SOURCE: Department of CNS and Cardiovascular Research, Schering-Plough Research Institute, Kenilworth, NJ, 07033-0539, USA

SOURCE: Biochimica et Biophysica Acta (2002), 1580(1), 77-93  
CODEN: BBACAQ; ISSN: 0006-3002

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The mol. mechanisms of cholesterol absorption in the intestine are poorly understood. With the goal of defining candidate genes involved in these processes a fluorescence-activated cell sorter-based, retroviral-mediated expression cloning strategy has been devised. SCH354909, a fluorescent derivative of ezetimibe, a compound which blocks intestinal cholesterol absorption but whose mechanism of action is unknown, was synthesized and shown to block intestinal cholesterol absorption in rats. Pools of cDNAs prepared from rat intestinal cells enriched in enterocytes were introduced into BW5147 cells and screened for SCH354909 binding. Several independent clones were isolated and all found to encode the scavenger receptor class B, type I (SR-BI), a protein suggested by others to play a role in cholesterol absorption. SCH354909 bound to Chinese hamster ovary (CHO) cells expressing SR-BI in specific and saturable fashion and with high affinity (Kd.apprx.18 nM). Overexpression of SR-BI in CHO cells resulted in increased cholesterol uptake that was blocked by micromolar concns. of ezetimibe. Anal. of rat intestinal sections by in situ hybridization

demonstrated that SR-BI expression was restricted to enterocytes. Cholesterol absorption was determined in SR-BI knockout mice using both an acute, 2-h, assay and a more chronic fecal dual isotope ratio method. The level of intestinal cholesterol uptake and absorption was similar to that seen in wild-type mice. When assayed in the SR-BI knockout mice, the dose of ezetimibe required to inhibit hepatic cholesterol accumulation induced by a cholesterol-containing 'western' diet was similar to wild-type mice. Thus, the binding of ezetimibe to cells expressing SR-BI and the functional blockade of SR-BI-mediated cholesterol absorption in vitro suggest that SR-BI plays a role in intestinal cholesterol metabolism and the inhibitory activity of ezetimibe. In contrast studies with SR-BI knockout mice suggest that SR-BI is not essential for intestinal cholesterol absorption or the activity of ezetimibe.

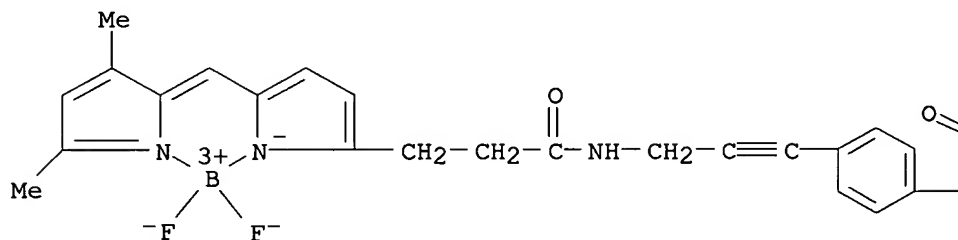
IT 302795-50-2, Sch 354909

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (Sch 354909, inhibitor of cholesterol absorption; SR-BI is not required for intestinal cholesterol absorption or for its inhibition by ezetimibe)

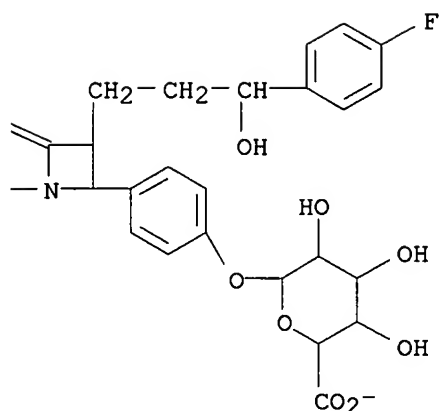
RN 302795-50-2 CAPLUS

CN Borate(1-), [4-[(2S,3R)-1-[4-[3-[[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-κN)methyl]-1H-pyrrol-2-yl-κN]-1-oxopropyl]amino]-1-propynyl]phenyl]-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl β-D-glucopyranosiduronato(2-)]difluoro-, hydrogen, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A



● H<sup>+</sup>



REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:171944 CAPLUS

DOCUMENT NUMBER: 136:210579

TITLE: Protein extracted from the intestines of vertebrates, which absorbs cholesterol, and use for identifying inhibitors of intestinal cholesterol transport

INVENTOR(S): Kramer, Werner; Glombik, Heiner

PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018432	A2	20020307	WO 2001-EP9554	20010818
WO 2002018432	A3	20020808		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10042447	A1	20020328	DE 2000-10042447	20000829
AU 2002010446	A5	20020313	AU 2002-10446	20010818
US 2002039774	A1	20020404	US 2001-939793	20010828
NO 2003000905	A	20030226	NO 2003-905	20030226
PRIORITY APPLN. INFO.:			DE 2000-10042447 A	20000829
			WO 2001-EP9554 W	20010818

AB The invention discloses a protein, extracted from the intestines of vertebrates, which absorbs cholesterol. The protein can identified using

highly affinity crosslinking compds. The invention also discloses the use of this protein in a method for identifying compds. which inhibit intestinal cholesterol transport. Preparation of radiolabeled photolabile compds. is included.

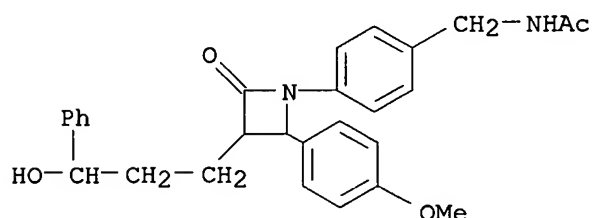
IT 402820-33-1D, radiolabeled 402820-34-2D, radiolabeled 402820-35-3D, radiolabeled

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cholesterol-absorbing protein from vertebrate intestine, and use for identifying inhibitors of intestinal cholesterol transport)

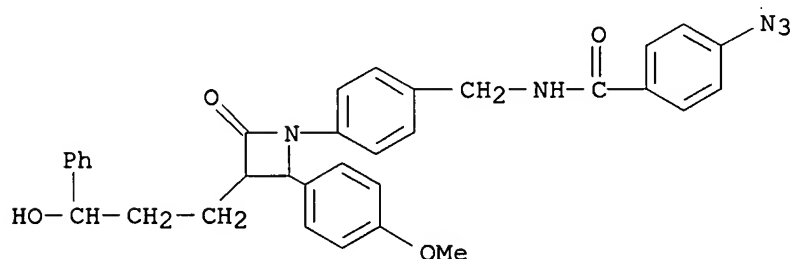
RN 402820-33-1 CAPLUS

CN Acetamide, N-[[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]phenyl]methyl]- (9CI) (CA INDEX NAME)



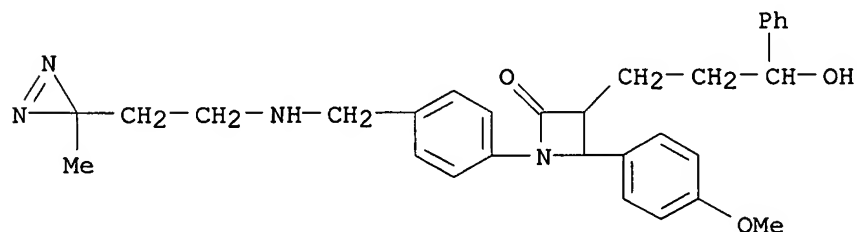
RN 402820-34-2 CAPLUS

CN Benzamide, 4-azido-N-[[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 402820-35-3 CAPLUS

CN 2-Azetidinone, 3-(3-hydroxy-3-phenylpropyl)-4-(4-methoxyphenyl)-1-[4-[[[2-(3-methyl-3H-diazirin-3-yl)ethyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)



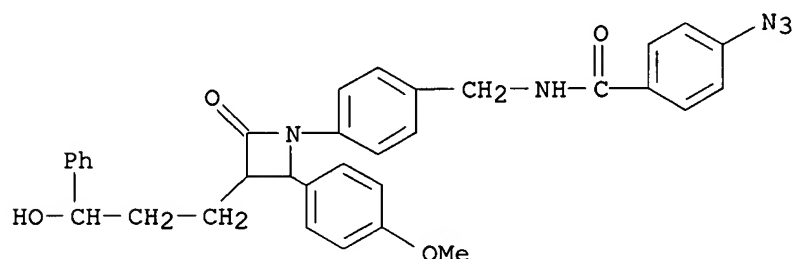


IT 402820-40-0P 402820-41-1P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(cholesterol-absorbing protein from vertebrate intestine, and use for identifying inhibitors of intestinal cholesterol transport)

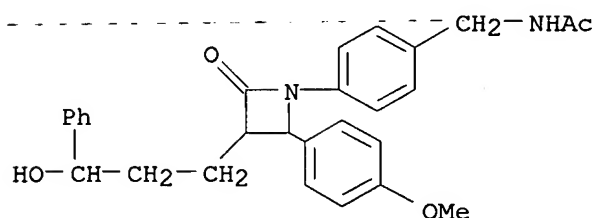
RN 402820-40-0 CAPLUS

CN Benzamide, 4-azido-N-[[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]phenyl]methyl]-, labeled with tritium (9CI) (CA INDEX NAME)



RN 402820-41-1 CAPLUS

CN Acetamide, N-[[4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]phenyl]methyl]-, labeled with tritium (9CI) (CA INDEX NAME)

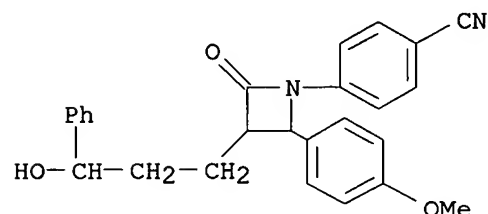


IT 402820-37-5P 402820-38-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(cholesterol-absorbing protein from vertebrate intestine, and use for identifying inhibitors of intestinal cholesterol transport)

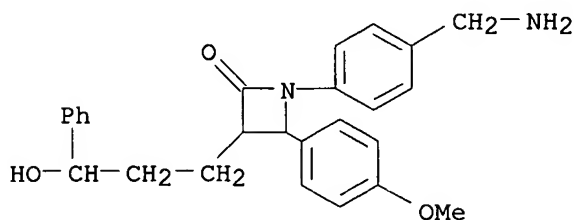
RN 402820-37-5 CAPLUS

CN Benzonitrile, 4-[3-(3-hydroxy-3-phenylpropyl)-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]- (9CI) (CA INDEX NAME)



RN 402820-38-6 CAPLUS

CN 2-Azetidinone, 1-[4-(aminomethyl)phenyl]-3-(3-hydroxy-3-phenylpropyl)-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:153916 CAPLUS

DOCUMENT NUMBER: 137:47059

TITLE: Synthesis of 3H, 14C and 13C6 labelled Sch 58235

AUTHOR(S): Hesk, D.; Bignan, G.; Lee, J.; Yang, J.; Voronin, K.; Magatti, C.; McNamara, P.; Koharski, D.; Hendershot, S.; Saluja, S.; Wang, S.

CORPORATE SOURCE: Schering Plough Research Institute, Kenilworth, NJ, 07033, USA

SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals (2002), 45(2), 145-155

CODEN: JLCRD4; ISSN: 0362-4803

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:47059

AB 3H-Sch 58235 was prepared at a specific activity of 29.1 Ci/mmol by Ir(COD)(Cy3P)PyPF6, catalyzed exchange with tritium gas. 14C-Sch 58235 was prepared in three steps from p-hydroxy[ring-U-14C]benzaldehyde with an overall radiochem. yield of 21%. 13C6-Sch 58235 was similarly prepared in three steps from p-hydroxy[ring-U-13C6]benzaldehyde in an overall yield of 41%.

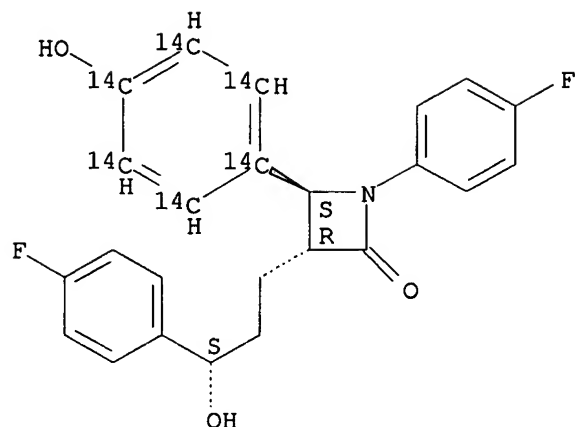
IT 438624-67-0P 438624-68-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of 3H, 14C and 13C6 labeled Sch 58235)

RN 438624-67-0 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl-14C6)-, (3R,4S)- (9CI) (CA INDEX NAME)

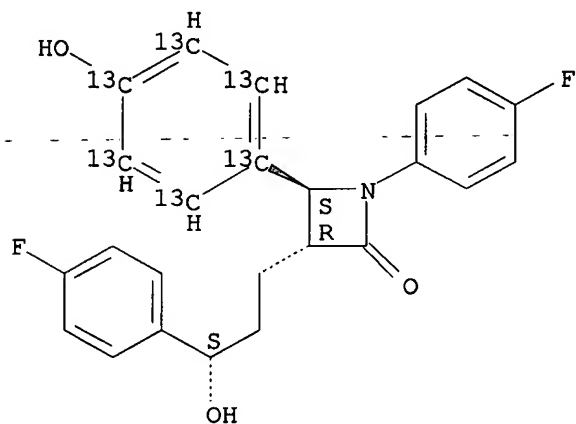
Absolute stereochemistry.



RN 438624-68-1 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:97662 CAPLUS

DOCUMENT NUMBER: 137:20238

TITLE: Synthesis of fluorescent biochemical tools related to the 2-azetidinone class of cholesterol absorption inhibitors

AUTHOR(S): Burnett, Duane A.; Caplen, Mary Ann; Browne, Margaret E.; Zhau, Hongrong; Altmann, Scott W.; Davis, Harry R.; Clader, John W.

CORPORATE SOURCE: Schering-Plough Research Institute, Kenilworth, NJ, 07033-0539, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(3), 315-318  
CODEN: BMCLE8; ISSN: 0960-894X

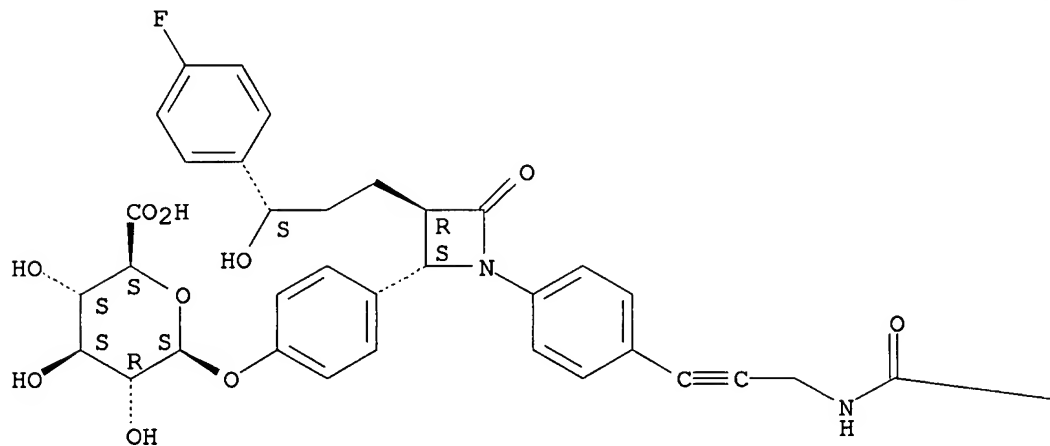
AB Fluorescent analogs, e.g. I, of the cholesterol absorption inhibitor (CAI), Sch 58235, have been designed and synthesized as single enantiomers. Biol. testing reveals that they are potent CAIs and are suitable tools for the investigation of the azetidinone CAI mechanism of action (MOA).

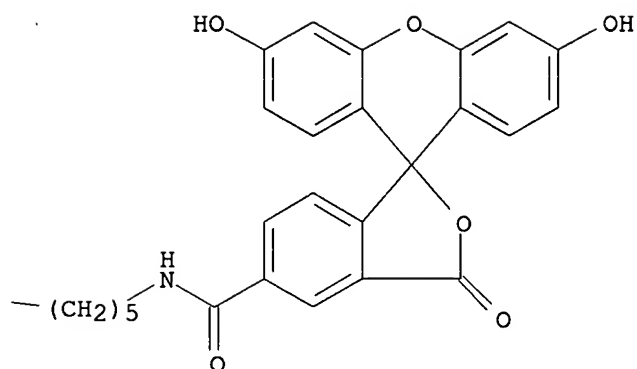
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

RN 302781-99-3 CAPLUS

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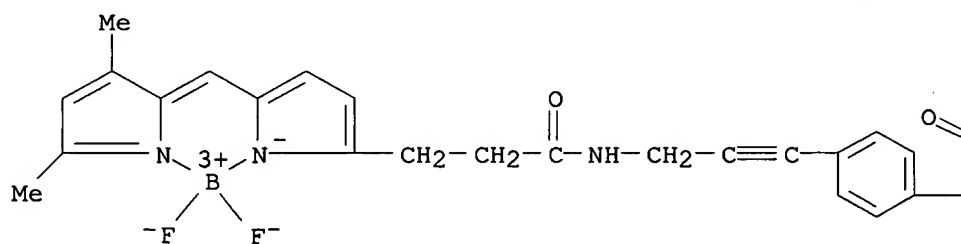
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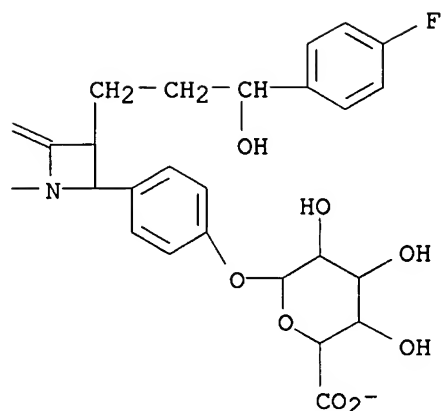




RN 302795-50-2 CAPLUS

CN Borate(1-), [4-[(2S,3R)-1-[4-[3-[[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-κN)methyl]-1H-pyrrol-2-yl-κN]-1-oxopropyl]amino]-1-propynyl]phenyl]-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl β-D-glucopyranosiduronato(2-)]difluoro-, hydrogen, (T-4)-(9CI) (CA INDEX NAME)

● H<sup>+</sup>



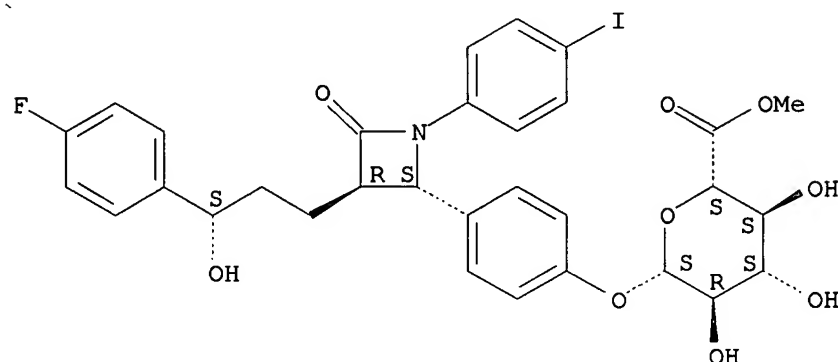
IT 302782-02-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (synthesis of fluorescent biochem. tools related to the 2-azetidinone  
 class of cholesterol absorption inhibitors)

RN 302782-02-1 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-  
 3-hydroxypropyl]-1-(4-iodophenyl)-4-oxo-2-azetidinyl]phenyl, methyl ester  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 302782-03-2P 302795-86-4P

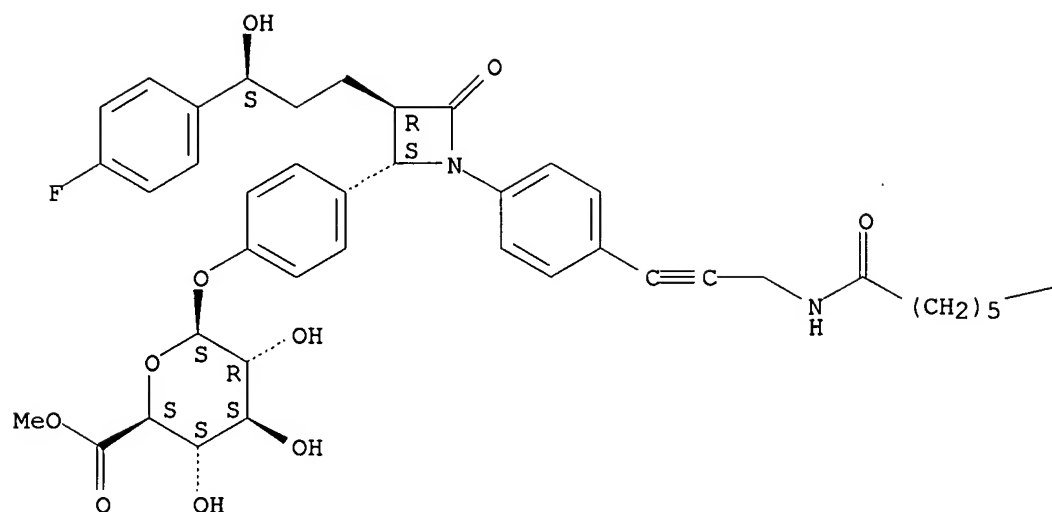
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (synthesis of fluorescent biochem. tools related to the 2-azetidinone  
 class of cholesterol absorption inhibitors)

RN 302782-03-2 CAPLUS

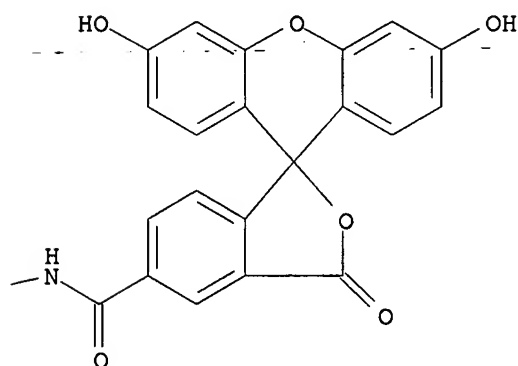
CN  $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-1-[4-[3-[[6-[[[(3',6'-  
 dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-  
 yl) carbonyl]amino]-1-oxohexyl]amino]-1-propynyl]phenyl]-3-[(3S)-3-(4-  
 fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl, methyl ester  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



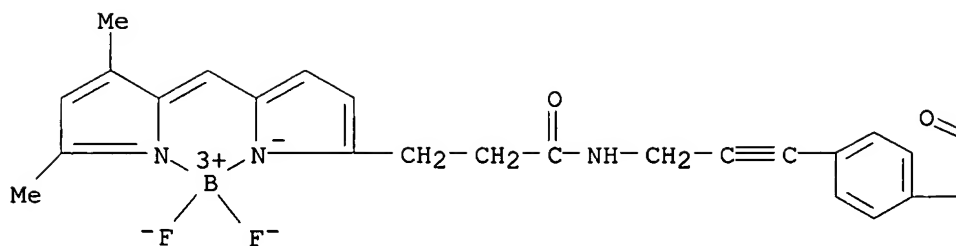
PAGE 1-B



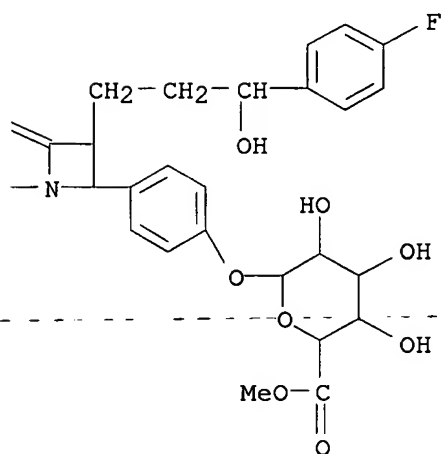
RN 302795-86-4 CAPLUS

CN Boron, difluoro[methyl 4-[(2S,3R)-1-[4-[3-[[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-κN)methyl]-1H-pyrrol-2-yl-κN]-1-oxopropyl]amino]-1-propynyl]phenyl]-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl β-D-glucopyranosiduronato]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:97661 CAPLUS

DOCUMENT NUMBER: 137:33143

TITLE: Synthesis of iodinated biochemical tools related to the 2-azetidinone class of cholesterol absorption inhibitors

AUTHOR(S): Burnett, Duane A.; Caplen, Mary Ann; Domalski, Martin S.; Browne, Margaret E.; Davis, Harry R., Jr.; Clader, John W.

CORPORATE SOURCE: Schering-Plough Research Institute, Kenilworth, NJ, 07033-0539, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(3), 311-314

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

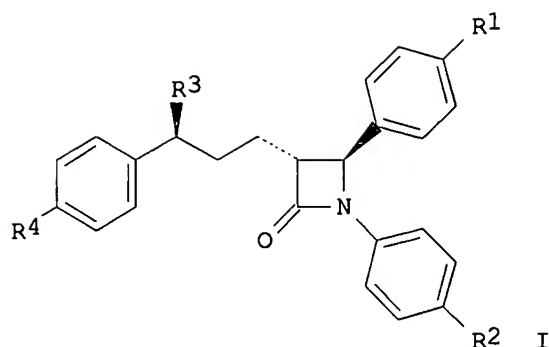
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:33143

GI





AB The discoveries of Sch 48461 (I; R<sub>1</sub>,R<sub>2</sub> = OMe; R<sub>3</sub>,R<sub>4</sub> = H) and Sch 58235 I (R<sub>1</sub>,R<sub>3</sub> = OH; R<sub>2</sub>,R<sub>4</sub> = F) and their novel pharmacol. of inhibition of cholesterol absorption have prompted efforts to determine their biol. mechanism of action (MOA). To this end, a series of radioiodinated analogs, e.g. I (R<sub>1</sub>,R<sub>2</sub> = OMe; R<sub>3</sub> = H; R<sub>4</sub> = I), with good to excellent in vivo activity have been designed and synthesized as single enantiomers. They are structurally consistent with the allowable SAR of the 2-azetidinone class of cholesterol absorption inhibitors.

IT 437713-51-4P 437713-52-5P

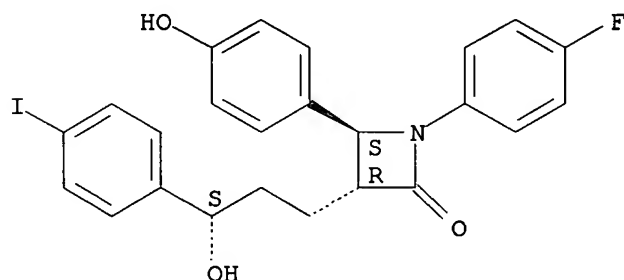
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

- - - (preparation of iodinated biochem. tools related to the 2-azetidinone class of cholesterol absorption inhibitors)

RN 437713-51-4 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[(3S)-3-hydroxy-3-(4-iodophenyl)propyl]-4-(4-hydroxyphenyl)-, (3R,4S)- (9CI) (CA INDEX NAME)

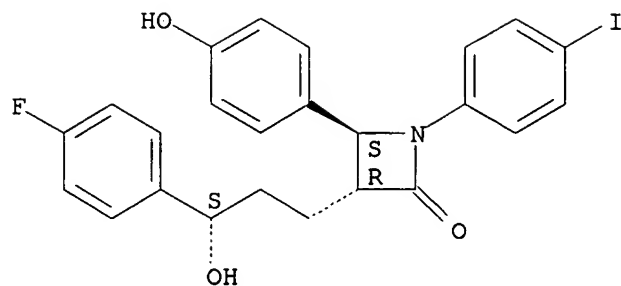
Absolute stereochemistry.



RN 437713-52-5 CAPLUS

CN 2-Azetidinone, 3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-1-(4-iodophenyl)-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 302782-02-1P 437713-56-9P 437713-57-0P

437713-58-1P 437713-59-2P 437713-62-7P

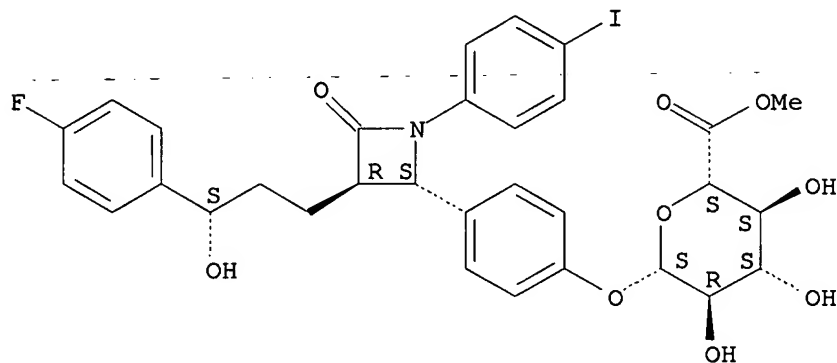
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of iodinated biochem. tools related to the 2-azetidinone class of cholesterol absorption inhibitors)

RN 302782-02-1 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-1-(4-iodophenyl)-4-oxo-2-azetidiny]phenyl, methyl ester (9CI) (CA INDEX NAME)

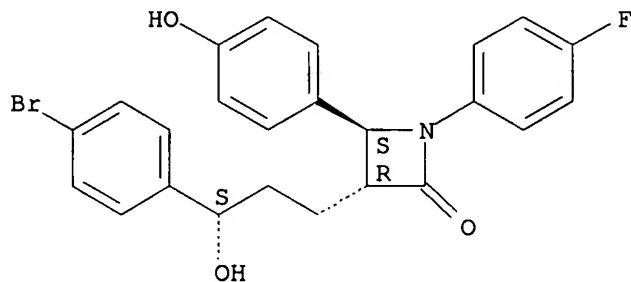
Absolute stereochemistry.



RN 437713-56-9 CAPLUS

CN 2-Azetidinone, 3-[(3S)-3-(4-bromophenyl)-3-hydroxypropyl]-1-(4-fluorophenyl)-4-(4-hydroxyphenyl)-, (3R,4S)- (9CI) (CA INDEX NAME)

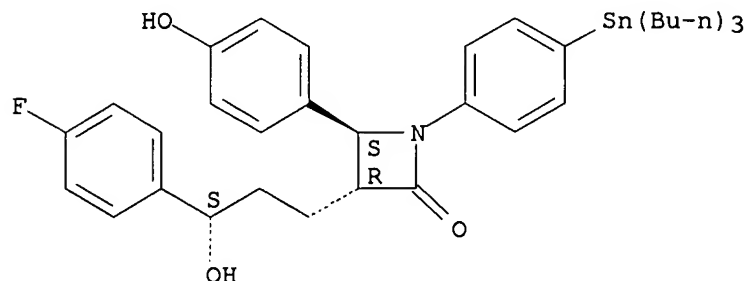
Absolute stereochemistry.



RN 437713-57-0 CAPLUS

CN 2-Azetidinone, 3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-1-[4-(tributylstannyl)phenyl]-, (3R,4S)- (9CI) (CA INDEX NAME)

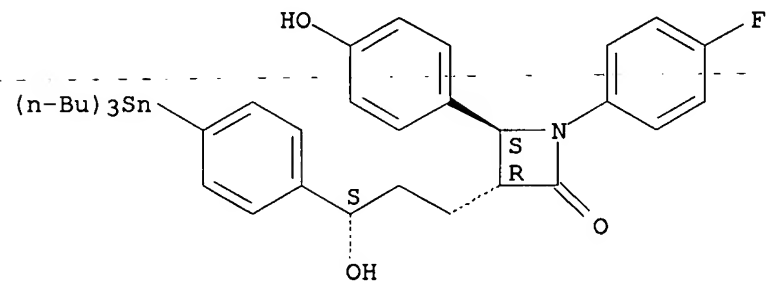
Absolute stereochemistry.



RN 437713-58-1 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-4-(4-hydroxyphenyl)-3-[(3S)-3-hydroxy-3-[4-(tributylstannyl)phenyl]propyl]-, (3R,4S)- (9CI) (CA INDEX NAME)

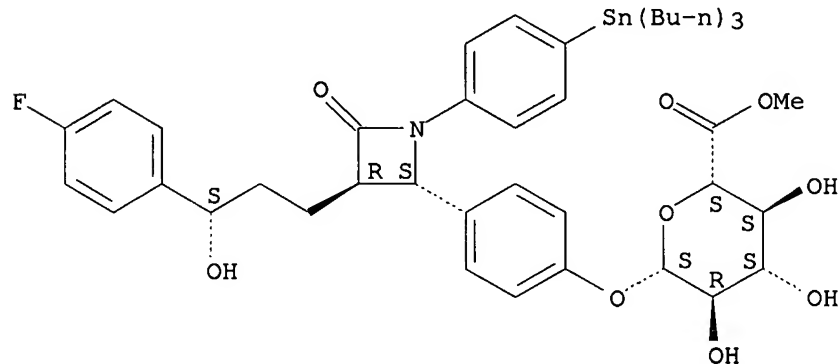
Absolute stereochemistry.



RN 437713-59-2 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-1-[4-(tributylstannyl)phenyl]-2-azetidinyl]phenyl, methyl ester (9CI) (CA INDEX NAME)

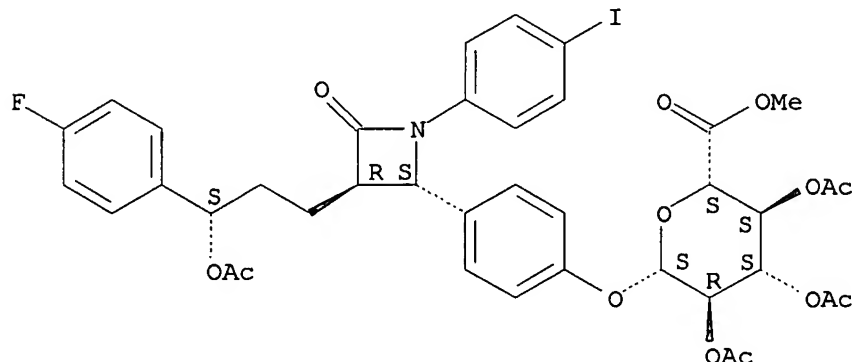
Absolute stereochemistry.



RN 437713-62-7 CAPLUS

CN     $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-3-[(3S)-3-(acetyloxy)-3-(4-fluorophenyl)propyl]-1-(4-iodophenyl)-4-oxo-2-azetidinyl]phenyl, methyl ester, 2,3,4-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:756982 CAPLUS

DOCUMENT NUMBER: 133:319280

TITLE: Use of azetidinone compounds in identifying cholesterol absorption inhibitors and proteins involved in cholesterol absorption

INVENTOR(S):           Altmann, Scott W.; Burnett, Duane A.; Davis, Harry R.,  
                              Jr.; Graziano, Michael P.; Laverty, Maureen; Yao,  
                              Xiaorui

PATENT ASSIGNEE(S): Schering Corp., USA

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000063703	A1	20001026	WO 2000-US9798	20000412

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,  
CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN,  
IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN,  
MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT,  
TZ, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002009714	A1	20020124	US 2001-918397	20010730
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PRIORITY APPLN. INFO.: US 1999-129610P P 19990416

US 2000-547509 A3 20000412

OTHER SOURCE(S): MARPAT 133:319280

AB The use of azetidinone compds. that are inhibitors of cholesterol absorption as tools for discovering and characterizing proteins involved in trafficking or absorption of cholesterol and/or cholesteryl esters in biol. systems is presented. These compds. can serve as tools for competitive binding assays to discover and characterize other chem. agents useful as cholesterol absorption inhibitors. New compds. of the present invention are also highly efficacious inhibitors of cholesterol absorption.

IT **302781-99-3P 302795-50-2P**

RL: ARG (Analytical reagent use); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

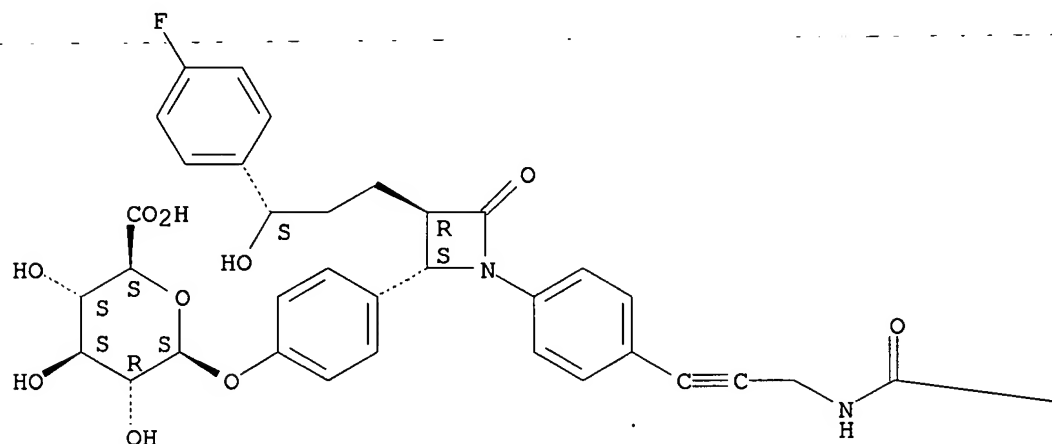
(azetidinone compds. in identifying cholesterol absorption inhibitors and proteins involved in cholesterol absorption)

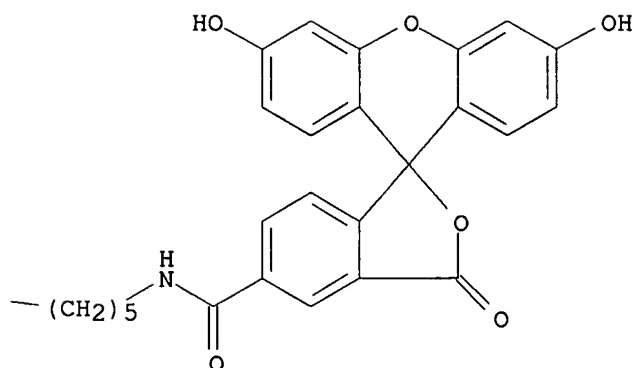
RN 302781-99-3 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-1-[4-[3-[[6-[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-oxohexyl]amino]-1-propynyl]phenyl]-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

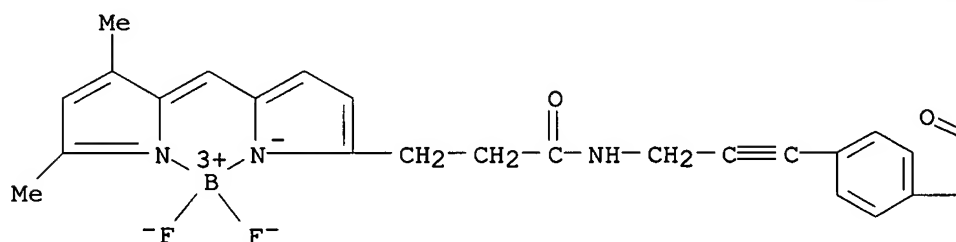
PAGE 1-A

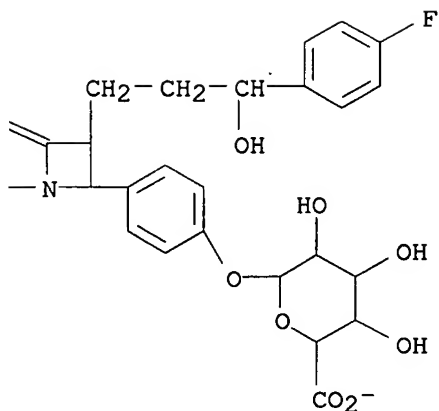




RN 302795-50-2 CAPLUS

CN Borate(1-), [4-[(2S,3R)-1-[4-[3-[[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene- $\kappa$ N)methyl]-1H-pyrrol-2-yl- $\kappa$ N]-1-oxopropyl]amino]-1-propynyl]phenyl]-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl  $\beta$ -D-glucopyranosiduronato(2-)]difluoro-, hydrogen, (T-4)-(9CI) (CA INDEX NAME)

● H<sup>+</sup>



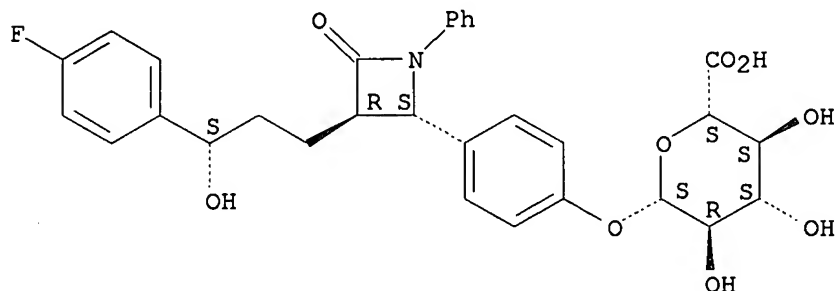
IT 302781-97-1D, fluorescent conjugates 302781-98-2D,  
fluorescent conjugates 302782-00-9 302795-63-7

RL: ARG (Analytical reagent use); BAC (Biological activity or effector,  
except adverse); BPR (Biological process); BSU (Biological study,  
unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL  
(Biological study); PROC (Process); USES (Uses)  
(azetidinone compds. in identifying cholesterol absorption inhibitors  
and proteins involved in cholesterol absorption)

RN 302781-97-1 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-  
3-hydroxypropyl]-4-oxo-1-phenyl-2-azetidinyl]phenyl (9CI) (CA INDEX NAME)

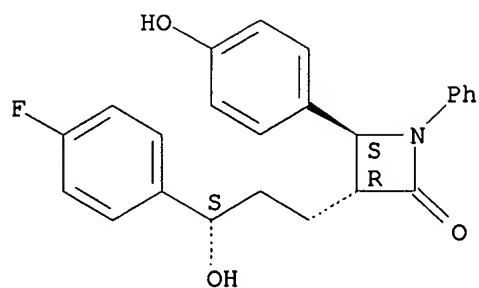
Absolute stereochemistry.



RN 302781-98-2 CAPLUS

CN 2-Azetidinone, 3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-  
hydroxyphenyl)-1-phenyl-, (3R,4S)- (9CI) (CA INDEX NAME)

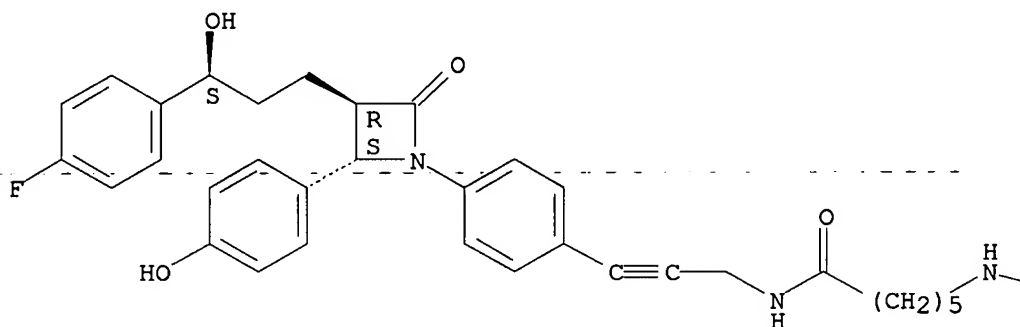
Absolute stereochemistry.



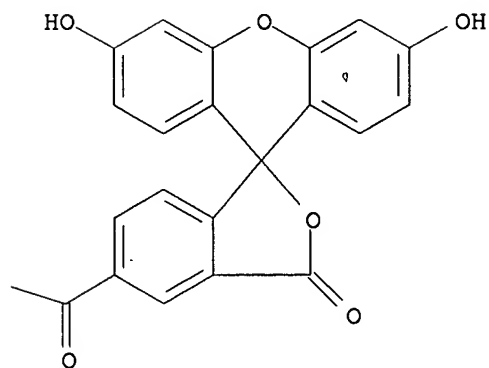
RN 302782-00-9 CAPLUS  
 CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-5-carboxamide,  
 N-[6-[[3-[4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-  
 hydroxyphenyl)-4-oxo-1-azetidiny]phenyl]-2-propynyl]amino]-6-oxohexyl]-  
 3',6'-dihydroxy-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B

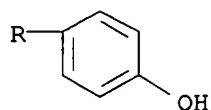
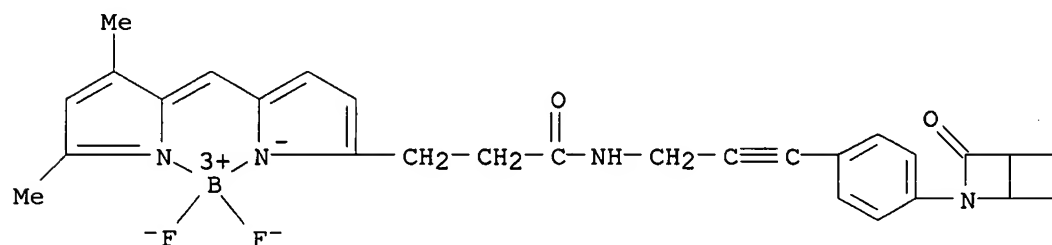


RN 302795-63-7 CAPLUS  
 CN Boron, [5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-κN)methyl]-N-[3-[4-  
 [(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-hydroxyphenyl)-4-

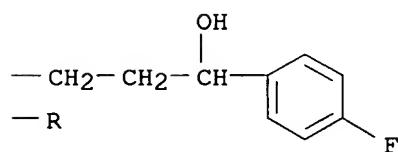


oxo-1-azetidiny]phenyl]-2-propynyl]-1H-pyrrole-2-propanamido-  
κN1]difluoro-, (T-4)- (9CI) (CA INDEX NAME)

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PAGE 1-B



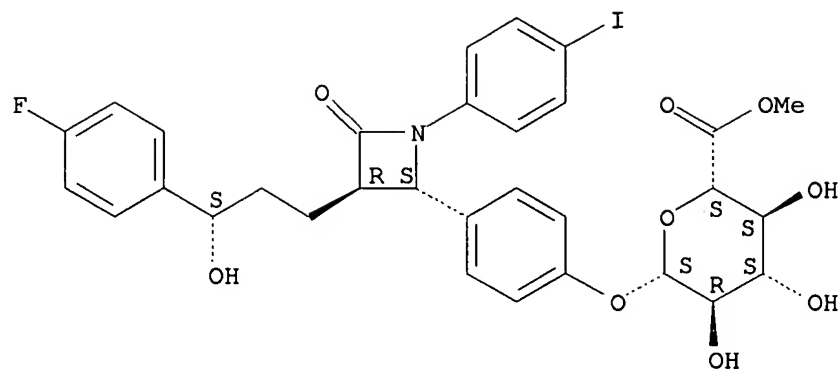
IT 302782-02-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
(azetidinone compds. in identifying cholesterol absorption inhibitors  
and proteins involved in cholesterol absorption)

RN 302782-02-1 CAPLUS

CN β-D-Glucopyranosiduronic acid, 4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-  
3-hydroxypropyl]-1-(4-iodophenyl)-4-oxo-2-azetidiny]phenyl, methyl ester  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 302782-03-2P 302795-86-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

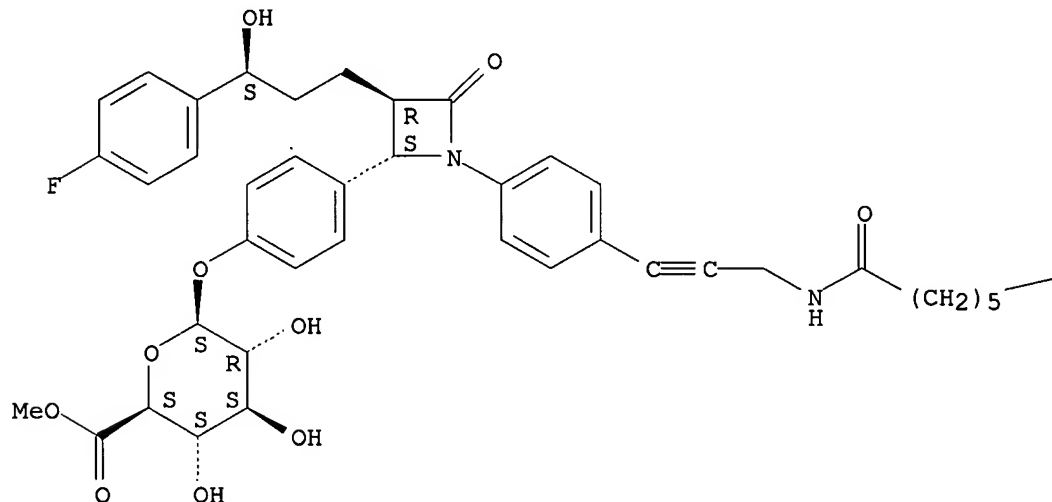
(azetidinone compds. in identifying cholesterol absorption inhibitors and proteins involved in cholesterol absorption)

RN 302782-03-2 CAPLUS

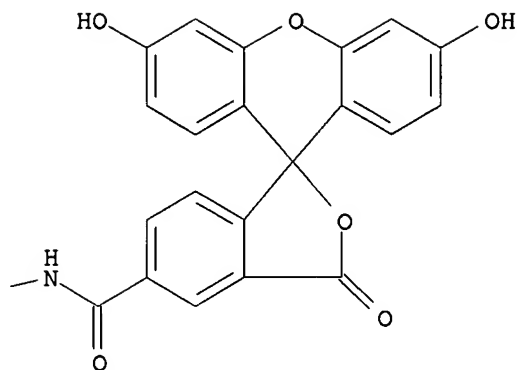
CN  $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-1-[4-[3-[[6-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl) carbonyl]amino]-1-oxohexyl]amino]-1-propynyl]phenyl]-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



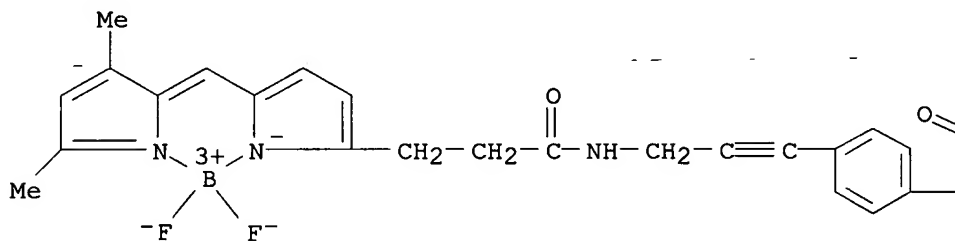
PAGE 1-B



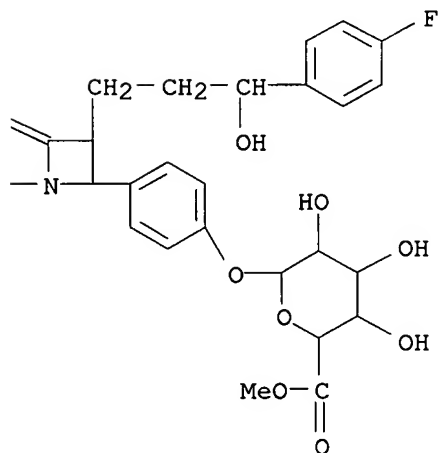
RN 302795-86-4 CAPLUS

CN Boron, difluoro[methyl 4-[(2S,3R)-1-[4-[3-[[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-κN)methyl]-1H-pyrrol-2-yl-κN]-1-oxopropyl]amino]-1-propynyl]phenyl]-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidiny]phenyl β-D-glucopyranosiduronato]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:401788 CAPLUS

DOCUMENT NUMBER: 133:17327

TITLE: Process for the synthesis of azetidinones and intermediates for use as hypocholesterolemics

INVENTOR(S): Thiruvengadam, Tiruvettipuram K.; Fu, Xiaoyong; Tann, Chou-Hong; Mcallister, Timothy L.; Chiu, John S.; Colon, Cesar

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

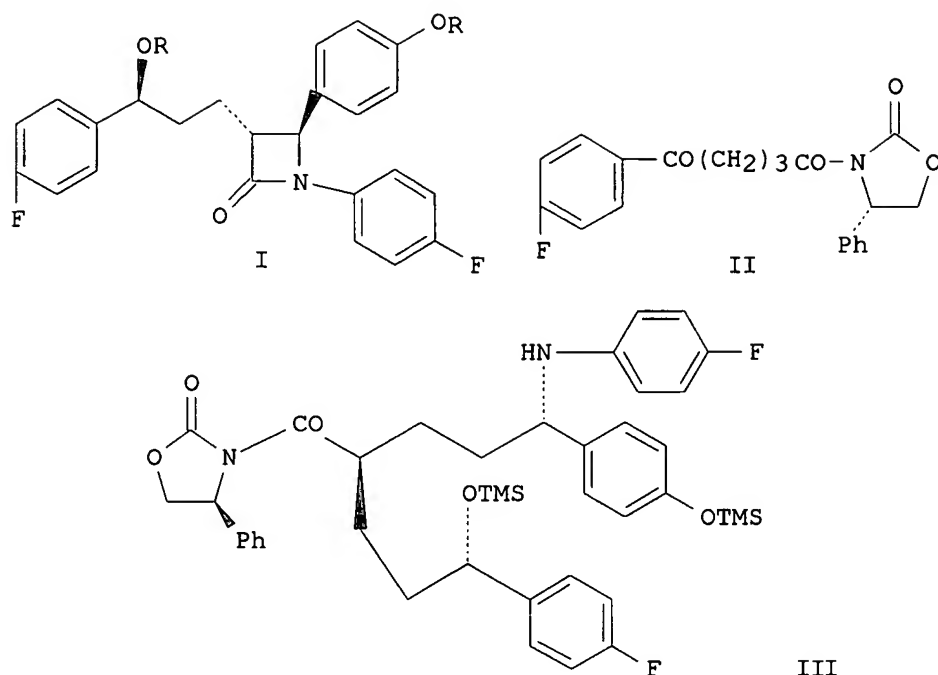
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000034240	A1	20000615	WO 1999-US27914	19991206
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1137634	A1	20011004	EP 1999-963973	19991206
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO			
JP 2002531546	T2	20020924	JP 2000-586688	19991206
PRIORITY APPLN. INFO.:			US 1998-206931	A 19981207
			WO 1999-US27914	W 19991206
OTHER SOURCE(S):	CASREACT 133:17327; MARPAT 133:17327			
GI				



AB Process for preparing the hypocholesterolemic compound (I) by reacting p-fluorobenzoylbutyric acid with pivaloyl chloride, acylating the product with a chiral auxiliary to obtain a ketone of formula (II), reduction in the presence of a chiral catalyst to an alc., condensing the chiral alc. with an imine and a silyl protecting agent to give a  $\beta$ -(substituted-amino)amide of formula (III), cyclization with a silylating agent and a fluoride ion catalyst to a protected lactam of formula I ( $R = \text{SiMe}_3$ ) (IV), and removal of the protecting groups is disclosed. The intermediates III and IV are also claimed.

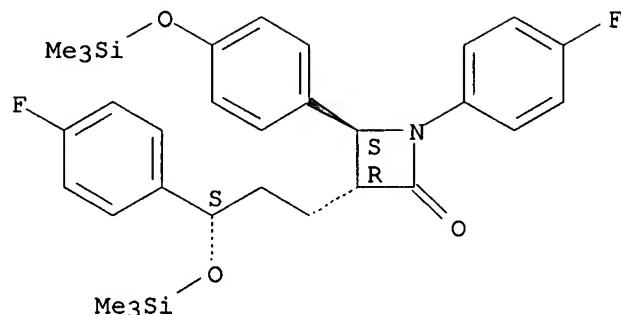
IT 272778-13-9P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(process for the synthesis of azetidinones and intermediates for use as hypocholesterolemic)

RN 272778-13-9 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-[(trimethylsilyl)oxy]propyl]-4-[4-[(trimethylsilyl)oxy]phenyl]-, (3R,4S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:651917 CAPLUS

DOCUMENT NUMBER: 132:77632

TITLE: An enzymatic synthesis of glucuronides of azetidinone-based cholesterol absorption inhibitors

AUTHOR(S): Reiss, P.; Burnett, D. A.; Zaks, A.

CORPORATE SOURCE: Schering-Plough Research Institute, Kenilworth, NJ, USA

SOURCE: Bioorganic & Medicinal Chemistry (1999), 7(10), 2199-2202

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:77632

AB Two derivs. (I and III) of a novel cholesterol absorption inhibitor, Sch 58235, were glucuronidated (to II and IV, resp.) with the help of glucuronyl transferases derived from bovine and dog liver microsomes. An efficient procedure for the iodination of IV was developed on an anal. scale to be used for the preparation of a <sup>125</sup>I-labeled radioactive glucuronide V.

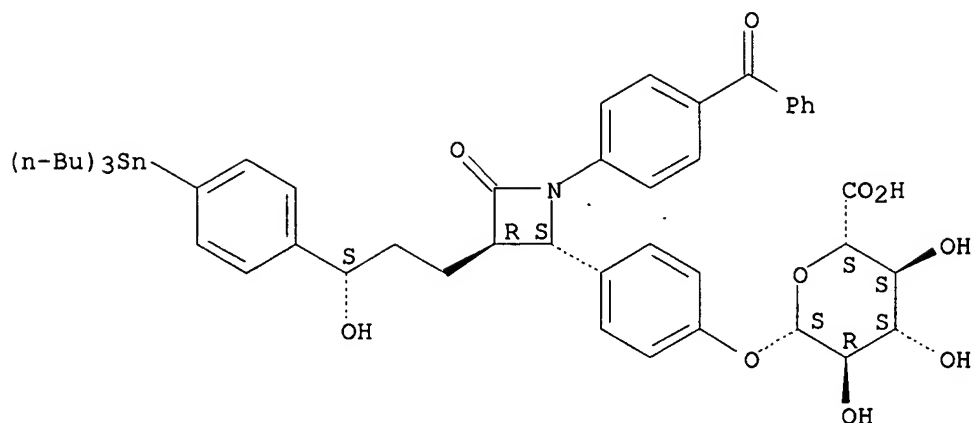
IT 253436-48-5P, Sch 60664 glucuronide 253436-49-6P

RL: BPN (Biosynthetic preparation); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)  
(enzymic synthesis of glucuronides of azetidinone-based cholesterol absorption inhibitors)

RN 253436-48-5 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-1-(4-benzoylphenyl)-3-[(3S)-3-hydroxy-3-[4-(tributylstannyl)phenyl]propyl]-4-oxo-2-azetidinyl]phenyl (9CI) (CA INDEX NAME)

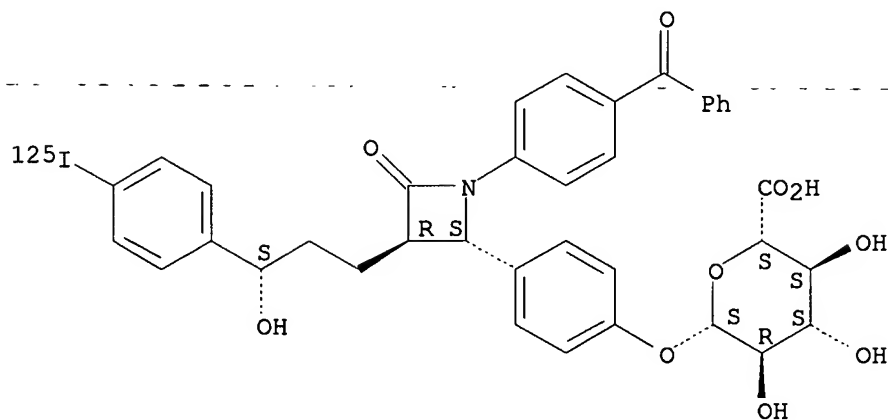
Absolute stereochemistry.



RN 253436-49-6 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, 4-[(2S,3R)-1-(4-benzoylphenyl)-3-[(3S)-3-hydroxy-3-[4-(iodo-125I)phenyl]propyl]-4-oxo-2-azetidinyl]phenyl (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



IT 253682-78-9, Sch 60664

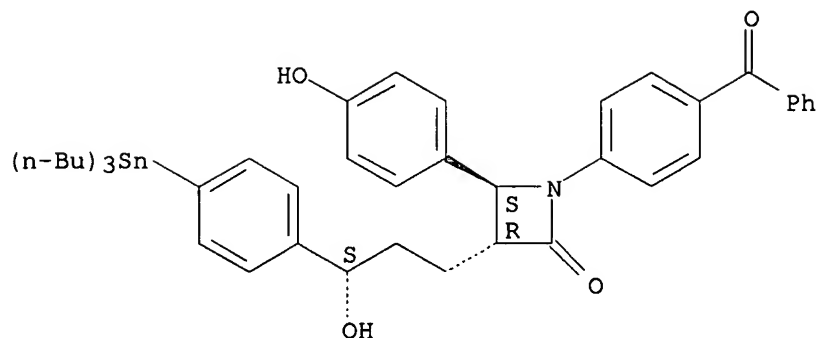
RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)

(enzymic synthesis of glucuronides of azetidinone-based cholesterol absorption inhibitors)

RN 253682-78-9 CAPLUS

CN 2-Azetidinone, 1-(4-benzoylphenyl)-4-(4-hydroxyphenyl)-3-[(3S)-3-hydroxy-3-[4-(tributylstannyl)phenyl]propyl]-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:788738 CAPLUS

DOCUMENT NUMBER: 130:52320

TITLE: Preparation of hydroxy-substituted azetidinone compounds as HMG-CoA reductase inhibitors

INVENTOR(S): Rosenblum, Stuart B.; Dugar, Sundeep; Burnett, Duane A.; Clader, John W.; McKittrick, Brian A.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S., 23 pp., Cont.-in-part of U.S. 5,767,115.

CODEN: USXXAM

- DOCUMENT-TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

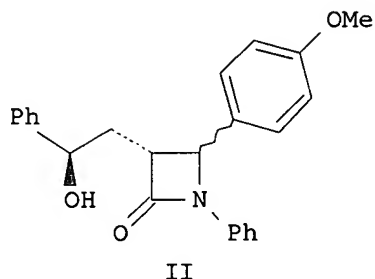
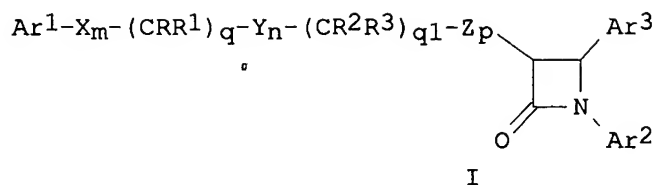
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5846966	A	19981208	US 1997-953825	19971014
US 5631365	A	19970520	US 1994-257593	19940609
US 5767115	A	19980616	US 1996-617751	19960318
PRIORITY APPLN. INFO.:			US 1993-102440	B2 19930921
			US 1994-257593	A2 19940609
			US 1996-617751	A2 19960318

OTHER SOURCE(S): MARPAT 130:52320

GI





AB The title compds. [I; Ar<sup>1</sup> and Ar<sup>2</sup> are (un)substituted aryl; Ar<sup>3</sup> is aryl or R<sup>5</sup>-substituted aryl; X, Y and Z are CH<sub>2</sub>, lower alkyl, etc.; R and R<sup>2</sup> are OR<sup>6</sup>, O(CO)R<sup>6</sup>, O(CO)OR<sup>9</sup>, etc.; R<sup>1</sup> and R<sup>3</sup> are H or lower alkyl; q is 0, 1; q<sub>1</sub> = 0, 1; m, n and p are 0-4; R<sup>5</sup> is OH, alkoxy, alkoxycarbonyl, etc.; R<sup>6</sup> is H, lower alkyl, aryl, etc.; R<sup>9</sup> is (un)substituted alkyl, aryl, etc.] are prepared I are useful for prevention and treatment of atherosclerosis or-reducing-plasma cholesterol levels. - Thus, -4-phenylbutyrolactone was - reacted with 4-methoxybenzylidylaniline in the presence of lithium diisopropylamide and n-BuLi at -78° to give the title compound (II). II (β-H) reduced serum cholesterol by 23%. Formulations containing I are also prepared

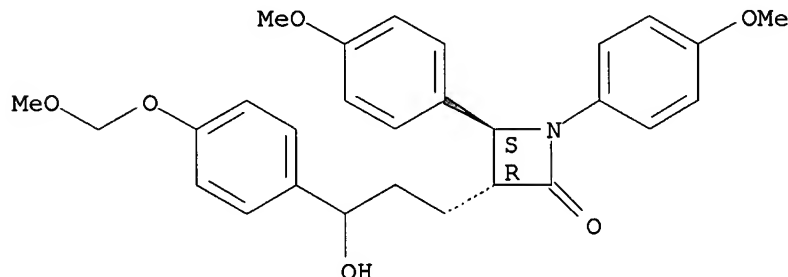
IT **208987-11-5P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of hydroxy-substituted azetidinone compds. as hypocholesterolemic agents)

RN 208987-11-5 CAPLUS

CN 2-Azetidinone, 3-[3-hydroxy-3-[4-(methoxymethoxy)phenyl]propyl]-1,4-bis(4-methoxyphenyl)-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



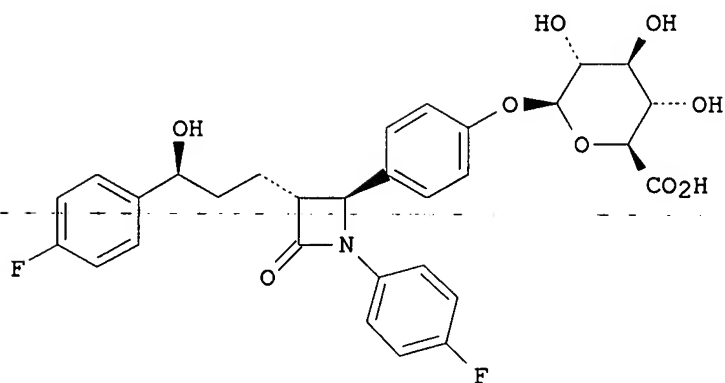
REFERENCE COUNT:

25

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1998:665214 CAPLUS  
DOCUMENT NUMBER: 130:3092  
TITLE: Enzymic glucuronidation of a novel cholesterol  
absorption inhibitor, SCH 58235  
AUTHOR(S): Zaks, Aleksey; Dodds, David R.  
CORPORATE SOURCE: Schering-Plough Research Institute, Kenilworth, NJ,  
07033, USA  
SOURCE: Applied Biochemistry and Biotechnology (1998),  
73(2-3), 205-214  
CODEN: ABIBDL; ISSN: 0273-2289  
PUBLISHER: Humana Press Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 130:3092  
GI



AB A glucuronide (I) of a novel cholesterol absorption inhibitor was synthesized on a 200-mg scale in 1 step via bovine liver glucuronyltransferase-catalyzed coupling of the glucuronyl moiety of UDP-glucuronic acid with the phenolic hydroxyl of Sch 58235. I yield is limited by the hydrolysis of UDP-glucuronic acid by impurities present in the com. microsomal preparation of the transferase. This detrimental effect of UDPGluA hydrolysis could be diminished by the presence of high concentration of glucuronyltransferase. Optimization of reaction conditions and purification procedure resulted in a process that proceeded with 95% conversion and 88% isolated product yield. The <sup>13</sup>C<sub>6</sub>-glucuronide of Sch 58235 was prepared with the help of a cascade of 8 enzymes operating concurrently in 1 pot.

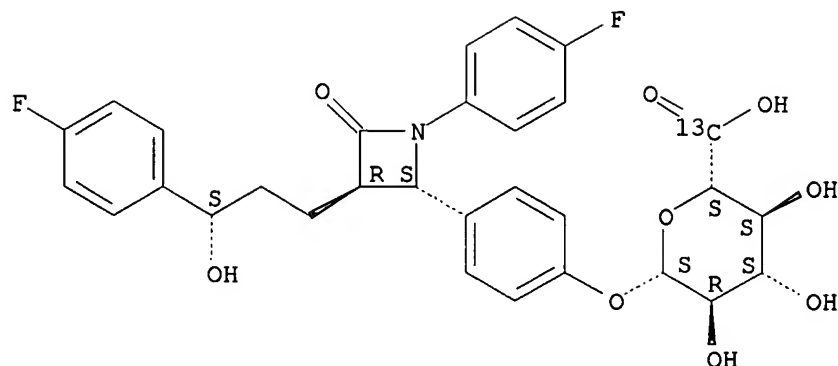
IT 215667-49-5P

RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP  
(Preparation)  
(enzymic glucuronidation of a novel cholesterol absorption inhibitor,  
SCH 58235)

RN 215667-49-5 CAPLUS

CN β-D-Glucopyranosiduronic-6-<sup>13</sup>C acid, 4-[(2S,3R)-1-(4-fluorophenyl)-3-  
[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:660120 CAPLUS

DOCUMENT NUMBER: 130:3720

TITLE: 2-azetidinone cholesterol absorption inhibitors:  
increased potency by substitution of the C-4 phenyl  
ring

AUTHOR(S): Vaccaro, Wayne D.; Sher, Rosy; Davis, Harry R., Jr.

CORPORATE SOURCE: Schering-Plough Research Institute, Kenilworth, NJ,  
07033-0539, USA

SOURCE: Bioorganic & Medicinal Chemistry (1998), 6(9),  
1429-1437

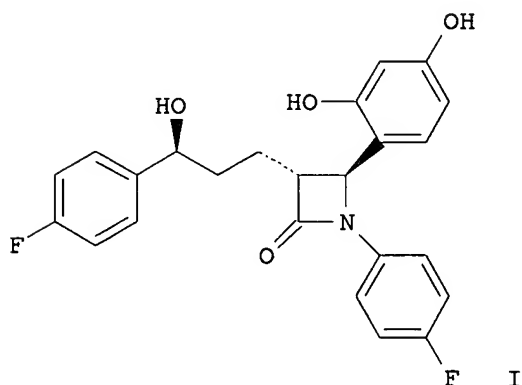
CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB SAR studies directed towards the optimization of 2-azetidinone cholesterol absorption inhibitors led to the discovery of I, the most potent

cholesterol absorption inhibitor yet identified.

IT **215603-93-3P 215603-94-4P**

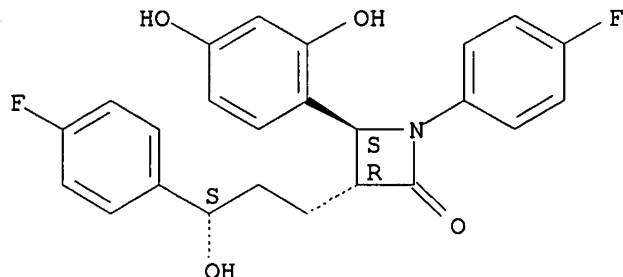
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(effect of substitution of the C-4 Ph ring on 2-azetidinone cholesterol absorption inhibitors)

RN 215603-93-3 CAPLUS

CN 2-Azetidinone, 4-(2,4-dihydroxyphenyl)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-, (3R,4S)- (9CI) (CA INDEX NAME)

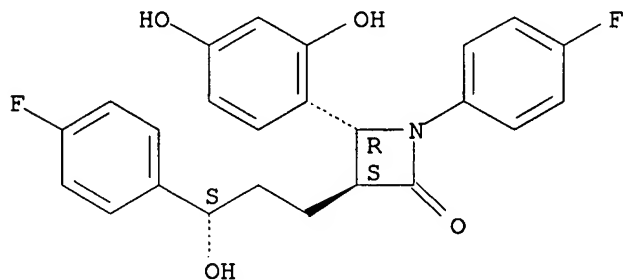
Absolute stereochemistry.



RN 215603-94-4 CAPLUS

CN 2-Azetidinone, 4-(2,4-dihydroxyphenyl)-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-, (3S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **215603-91-1P 215603-92-2P**

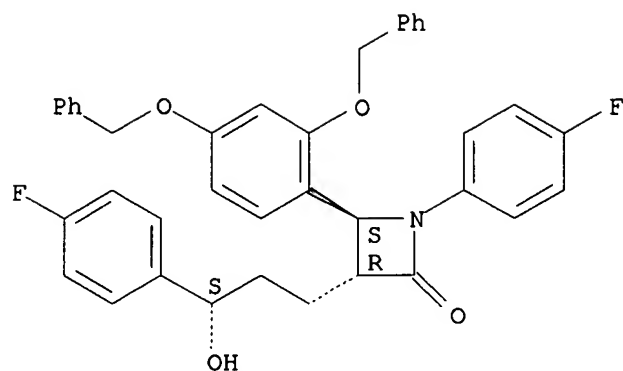
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(effect of substitution of the C-4 Ph ring on 2-azetidinone cholesterol absorption inhibitors)

RN 215603-91-1 CAPLUS

CN 2-Azetidinone, 4-[2,4-bis(phenylmethoxy)phenyl]-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-, (3R,4S)- (9CI) (CA INDEX NAME)

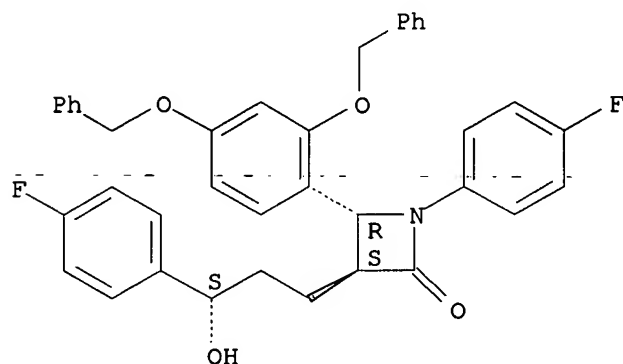
Absolute stereochemistry.



RN 215603-92-2 CAPLUS

CN 2-Azetidinone, 4-[2,4-bis(phenylmethoxy)phenyl]-1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-, (3S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:414731 CAPLUS

DOCUMENT NUMBER: 129:67689

TITLE: Preparation of hydroxy-substituted azetidinone compounds as hypocholesterolemic agents

INVENTOR(S): Rosenblum, Stuart B.; Dugar, Sundeep; Burnett, Duane A.; Clader, John W.; McKittrick, Brian A.

PATENT ASSIGNEE(S): Schering-Plough Corporation, USA

SOURCE: U.S., 21 pp., Cont.-in-part of U.S. 5,631,365. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

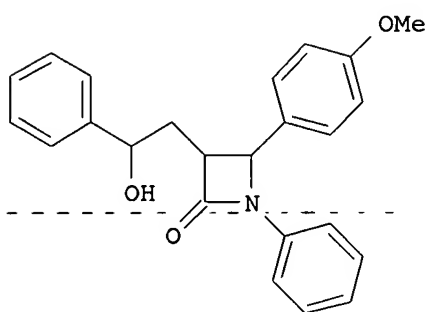
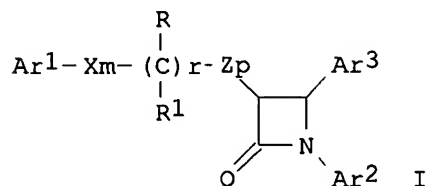
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5767115	A	19980616	US 1996-617751	19960318

US 5631365	A	19970520	US 1994-257593	19940609
US 5846966	A	19981208	US 1997-953825	19971014
US 37721	E	20020528	US 2000-594996	20000615

PRIORITY APPLN. INFO.: US 1993-102440 B2 19930921  
US 1994-257593 A2 19940609  
US 1996-617751 A2 19960318

OTHER SOURCE(S): CASREACT 129:67689; MARPAT 129:67689  
GI



AB The title compds. [I; Ar1 and Ar2 are (un)substituted aryl; Ar3 is aryl or R5-substituted aryl; X, Y and Z are CH2, lower alkyl, etc.; R and R2 are OR6, O(CO)R6, O(CO)OR9, etc.; R1 and R3 are H or lower alkyl; q is 0 or 1; r is 0 or 1; m, n and p are 0-4; R5 is OH, alkoxy, alkoxycarbonyl, etc.; R6 is H, lower alkyl, aryl, etc.; R9 is (un)substituted alkyl, aryl, etc.] are prepared I are useful for prevention and treatment of atherosclerosis or reducing plasma cholesterol levels. Thus, 4-phenylbutyrolactone was reacted with 4-methoxybenzylidylaniline in the presence of lithium diisopropylamide and n-BuLi at -78° to give the title compound (II). Formulations containing I are also prepared

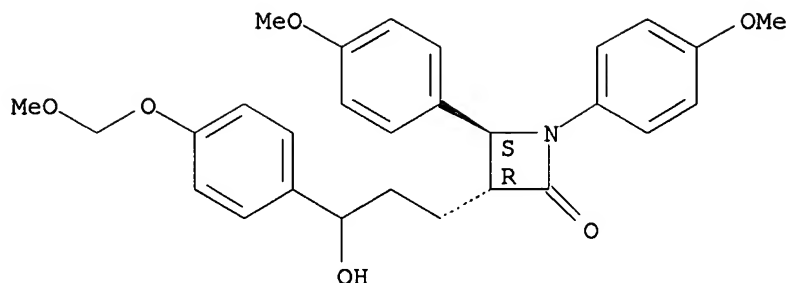
IT **208987-11-5P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of hydroxy-substituted azetidinone compds. as hypocholesterolemic agents)

RN 208987-11-5 CAPLUS

CN 2-Azetidinone, 3-[3-hydroxy-3-[4-(methoxymethoxy)phenyl]propyl]-1,4-bis(4-methoxyphenyl)-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:352625 CAPLUS

DOCUMENT NUMBER: 129:41376

TITLE: Preparation of sugar-substituted 2-azetidinones useful as hypocholesterolemic agents

INVENTOR(S): Yumibe, Nathan P.; Alton, Kevin B.; Van Heek, Margaret; Davis, Harry R.; Vaccaro, Wayne D.

PATENT ASSIGNEE(S): Schering Corp., USA

SOURCE: U.S., 18 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY\_ACC. NUM. COUNT: 1

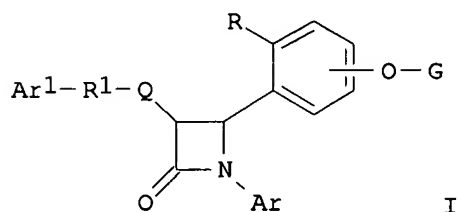
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5756470	A	19980526	US 1996-741179	19961029
CN 1205707	A	19990120	CN 1996-199226	19961029
CN 1103780	B	20030326		

PRIORITY APPLN. INFO.: US 1996-741179 A 19961029

OTHER SOURCE(S): MARPAT 129:41376

GI



AB Hypocholesterolemic sugar-substituted 2-azetidinones I (R = H, OH, sugar; R1 = alkylene, cycloalkylene, phenylene, alkenylene; G = sugar residue; Q = bond, spiro group; Ar, Ar1 = aryl), are disclosed, as well as a method of lowering cholesterol by administering said compds., pharmaceutical compns. containing them, and the combination of a sugar-substituted 2-azetidinone cholesterol-lowering agent and a cholesterol biosynthesis inhibitor for the treatment and prevention of atherosclerosis. Thus,

1-O-[4-[trans-(3R,4S)-1-(4-fluorophenyl)-2-oxo-3-[3-[(S)-hydroxy-4-fluorophenylpropyl]]-4-azetidinyl]phenyl]-β-D-glucuronic acid was prepared as anticholesteremic agent 58 % reduction in plasma cholesterol with 3 mg/kg dose in hamsters.

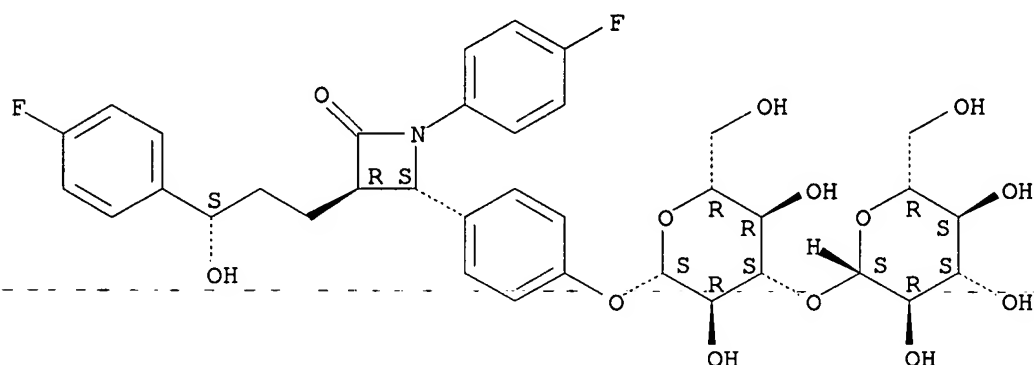
IT **208259-77-2P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of sugar substituted azetidinones useful as hypocholesterolemic agents)

RN 208259-77-2 CAPLUS

CN 2-Azetidinone, 1-(4-fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-[4-[(3-O-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]phenyl]-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **208259-78-3P**

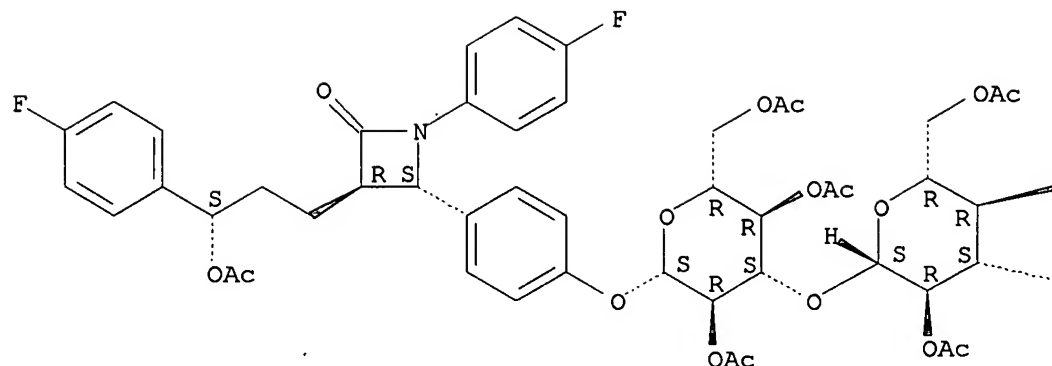
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of sugar substituted azetidinones useful as hypocholesterolemic agents)

RN 208259-78-3 CAPLUS

CN 2-Azetidinone, 3-[(3S)-3-(acetyloxy)-3-(4-fluorophenyl)propyl]-1-(4-fluorophenyl)-4-[4-[[2,4,6-tri-O-acetyl-3-O-(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]phenyl]-, (3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





OAc

OAc

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:85303 CAPLUS

DOCUMENT NUMBER: 128:212915

TITLE: Synthesis of C3 Heteroatom-Substituted Azetidinones That Display Potent Cholesterol Absorption Inhibitory Activity

AUTHOR(S): McKittrick, Brian A.; Ma, Ke; Huie, Keith; Yumibe, Nathan; Davis, Harry Jr.; Clader, John W.; Czarniecki, Michael; McPhail, Andrew T.

CORPORATE SOURCE: Schering-Plough Research Institute, Kenilworth, NJ, 07033, USA

SOURCE: Journal of Medicinal Chemistry (1998), 41(5), 752-759  
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The C3 phenylpropyl side chain of N-phenylazetidinones related to SCH 56524 was modified by replacing the hydroxymethylene with various isoelectronic or isosteric groups. Modifications at the 3' position led to less-active compds.; however, modifications at the 1' position provided compds. with improved cholesterol absorption inhibitory activity. An

enantioselective route for the synthesis of C3 1'-sulfur-substituted azetidinones and the development of structure-activity relationships for this series of compds. are presented.

IT 204325-97-3, Sch 56191

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation of azetidinones as cholesterol inhibitors)

RN 204325-97-3 CAPLUS

CN 2-Azetidinone, 3-(3-hydroxy-3-phenylpropyl)-4-(4-methoxyphenyl)-1-phenyl-,  
(3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

